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South Asia

World Agriculture Regional Supplement

Review of 1982 and Outlook for 1983

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U.S. DEPT. OF AGRICULTURE
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ABSTRACT

A poor 1982 monsoon led to reduced farm output and slowed economic growth in South Asia in 1982/83. Farm imports, including imports of U.S. wheat and soybean oil, generally increased, while farm exports weakened. Virtually all countries continued efforts to adjust their economies to balance of payments deficits through import substitution and export expansion. Adjustment efforts involved the region's farm sectors and have been complimented by stronger producer prices for food grains and edible oils, the region's major farm imports. With an average 1983 monsoon, the region's economy is expected to rebound strongly in 1983/84, with farm imports declining and exports rising.

Keywords: South Asia, Bangladesh, India, Nepal, Pakistan, Sri Lanka, economic growth, agricultural production, agricultural trade, balance of payments, public distribution.

FOREWORD

This report describes and analyzes recent developments in South Asia that affect the agricultural trade of the United States. The area covered includes Afghanistan, Bangladesh, India, Nepal, Pakistan, and Sri Lanka. This is the first ERS report to deal exclusively with South Asia.

The report summarizes key events associated with the economic and agricultural performance of each country in the region. World and domestic policy developments are discussed in explaining the situation in 1982 and in providing the outlook for 1983. In addition, two special articles highlight significant issues in the region: the impact of balance of payments problems on agricultural trade and development, and the role of the public distribution systems for food grains.

Rip Landes directed and coordinated this report. Sections were written by Amjad Gill, Rip Landes, and Richard Nehring. Wayne Denney, Gary Ender, Michael Kurtzig, Michael Lopez, and Don Sillers reviewed the report and provided valuable comments. Grateful acknowledgement is extended to the Foreign Agricultural Service, whose agricultural counselors and attaches provided much of the information contained in this report, and whose analysts also provided useful comments. Patricia Abrams, Bernadine Holland, Deloris Midgette, Linda Mitchell, and Rebekah Pearson did the word processing.

The International Economics Division's program of agricultural outlook and situation analysis and reporting includes the following regularly scheduled publications: *World Agricultural Outlook and Situation*, published quarterly; *World Agriculture Regional Supplements*, a series of 11 reports, issued annually, covering China, East Asia, Eastern Europe, Latin America, the Middle East and North Africa, North America and Oceania, South Asia, Southeast Asia, the Soviet Union, Sub-Saharan Africa, and Western Europe; *Foreign Agricultural Trade of the United States*, published bi-monthly; and *Outlook for U.S. Agricultural Exports*, published quarterly.

The division also publishes the *Food Aid Needs and Availabilities* report and the *World Indices of Agricultural and Food Production*. For information on those publications, contact the International Economics Division, USDA, Rm. 348, 500 12th Street, SW., Washington, D.C. 20250.

We welcome any comments, suggestions, or questions about this report or other aspects of the agricultural situation in South Asia. Responses should be directed to the Asia Branch, International Economics Division, Economic Research Service, USDA, Room 350, 500 12th Street, SW., Washington, D.C. 20250. Our telephone number is (202) 447-8676.

Carmen O. Nohre
Branch Chief

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EXPLANATORY NOTES

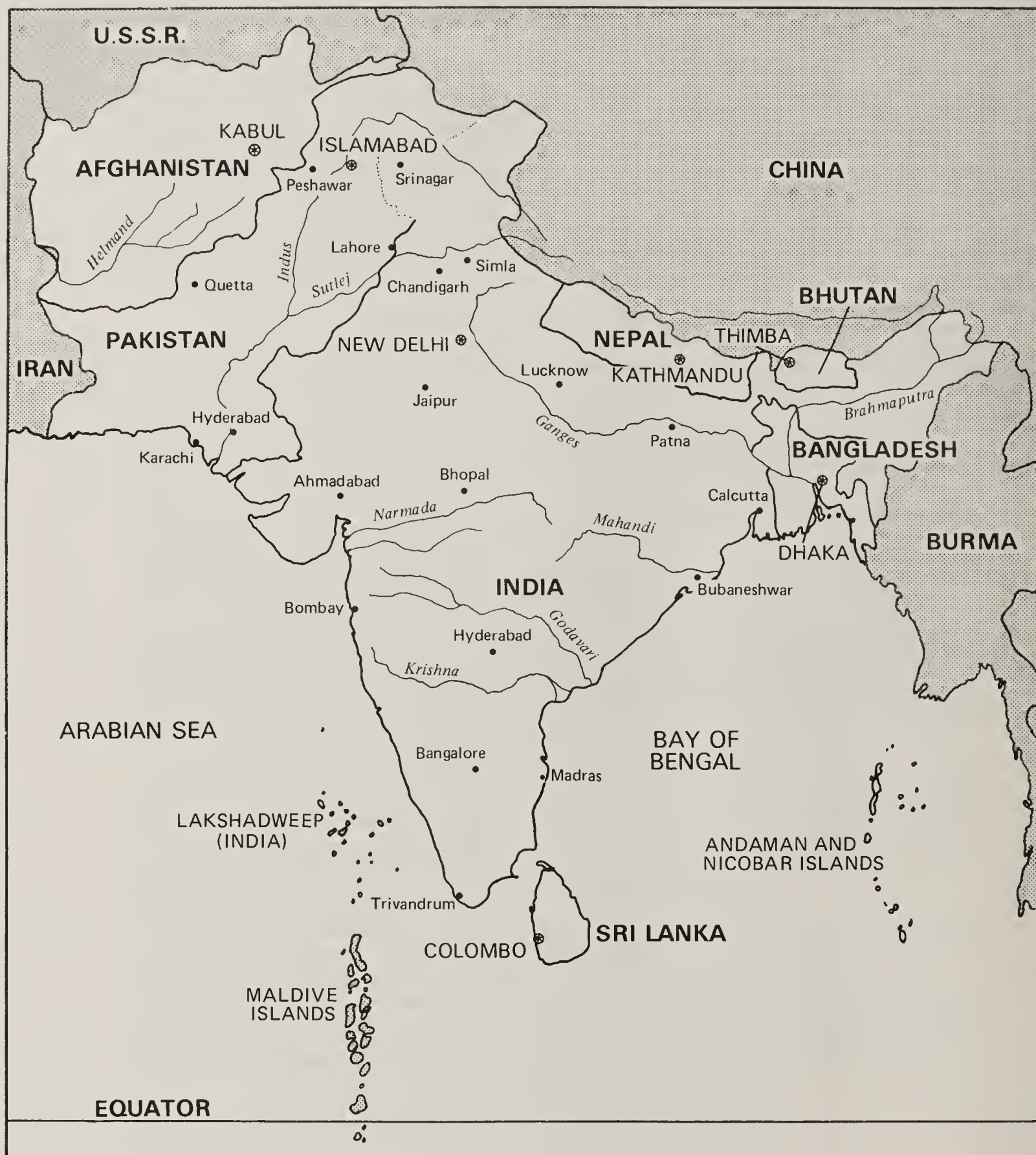
For the purpose of this report, the South Asia region includes Afghanistan, Bangladesh, India, Nepal, Pakistan, and Sri Lanka. However, specific discussion of Afghanistan has been omitted from the report because of the lack of meaningful information on that country since the Soviet incursion in December 1979.

As is the convention in South Asia, farm production aggregates are reported by split years that include all crops grown under the influence of the same monsoon. For example, 1982/83 includes crops harvested in fall 1982 through spring 1983. Production of individual crops is reported by year(s) of harvest. For example, the 1982/83 rice crop is the crop harvested in fall 1982 through spring 1983, and the 1983 wheat crop is the crop harvested in the spring of 1983. Split marketing years are frequently used to analyze supply and distribution issues and are always defined when first used in reference to a country (or region) and commodity.

Variables relating to general economic performance are reported by country fiscal years, which are defined when first used. The term fiscal year (i.e. fiscal 1983) refers to the fiscal year of the country being discussed, unless otherwise specified.

The following conventions are used in the report: GNP = gross national product, GDP = gross domestic product, HYV = high-yielding variety, — negligible, and NA = not available. Rice refers to milled rice, and paddy refers to unmilled rice. All rice data are for milled rice unless otherwise specified. All weights are metric. All dollars are U.S. dollars.

Data used in this report may differ from those previously reported because of revision. This report is based on data available as of July 15, 1983.



SOUTH ASIA

REVIEW OF AGRICULTURE IN 1982 AND OUTLOOK FOR 1983

REGIONAL OVERVIEW

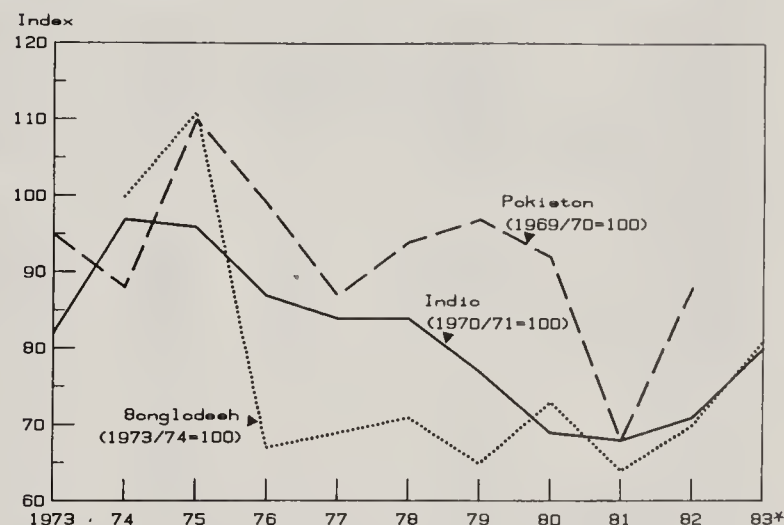
Poor Monsoon Slows Region's 1982/83 Growth

Growth slowed in all South Asian economies during 1982/83, after several years of above-trend performance. The slowdown was primarily due to a poor 1982 monsoon that damaged fall 1982 harvests and led to either a decline or a smaller-than-expected gain in total agricultural production in each country. Declines were most severe in India, Sri Lanka, and Nepal. Farm output was least affected in Pakistan, where major crops are heavily protected by irrigation. Except in Pakistan, the expansion of the region's growing industrial sectors was slowed by weakened demand, shortages of hydroelectric power and, in some cases, by foreign exchange constraints that limited imports of needed industrial inputs. Overall, the setback in the region's economy was not as severe as the one that accompanied the last widespread drought in 1979/80.

Inflation in wholesale and consumer prices generally slowed throughout the region in 1982/83. Price increases were moderated by stable energy costs and more restrictive monetary and fiscal policies, as well as slackened demand. There was, however, a trend toward higher real prices for food items, particularly rice and wheat. Real increases in cereal prices are unusual in most of South Asia because of substantial government involvement in stabilizing cereal prices through stockholding and subsidized distribution. The upturn in wheat and rice prices, most noticeable in India and Pakistan, stemmed from increased government-administered procurement and issue prices, as well as recent drought-induced shortages in some areas.

The balance of payments positions of all South Asian countries remained very tight during 1982/83. The deterioration of the region's terms of trade continued to

Deflated Wholesale Price Indices for Wheat In South Asia

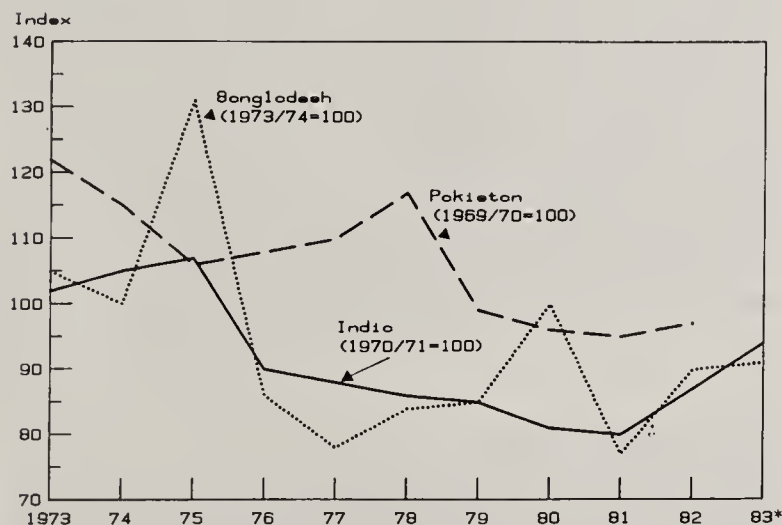


* Partial data.

Source: Official sources in each country.

lead to burdensome trade and current account deficits. The financing of these deficits has strained existing capital inflows, eroded foreign exchange holdings, and required increased borrowing from commercial and concessional lenders, including the International Monetary Fund (IMF). Generally, the South Asian countries experienced a decline in their ability to import agricultural commodities on commercial terms without interrupting imports of raw materials and capital equipment needed for sustained economic growth. Because of the pressing need to reduce balance of payments deficits, efforts to expand exports and reduce imports have become a major focus of economic policy in the region (see article on South Asian balance of payments problems).

Deflated Wholesale Price Indices for Rice In South Asia



* Partial data.

Source: Official sources in each country.

Fall in Rice Production Boosts Wheat Imports

Following record output in 1981/82 (July/June), South Asian cereal production fell an estimated 5.6 percent in 1982/83, as drought-induced declines in the fall 1982 rice and coarse grain harvests offset higher wheat production. Rice production fell most sharply in India and Nepal, as the 1982 monsoon provided only sporadic and below-average rainfall over most of the subcontinent. Spring 1982 wheat harvests increased across most of the region, benefiting from more favorable rainfall, irrigation protection, and sustained growth in input use.

Reduced cereal production led to significantly larger imports of cereals, principally wheat, in 1982/83 because government stocks remained low following the 1979/80 drought, and because of increased demand for publicly distributed cereals. Wheat purchases by India and Bangladesh rose most sharply as each country required additional wheat to build stocks and meet public distribution

Table 1.—Supply and distribution of cereals in South Asia

Marketing Year (July/June)	Area	Yield	Production	Opening gov't. stocks	Imports	Exports	Domestic Disappearance Total	Per cap	Ending gov't. stocks
	1,000 ha	Tons/ha			1,000 tons			Kgs	1,000 tons
Rice									
1979/80	53,759	1.14	61,231	10,119	1,145	1,516	63,009	69.38	7,970
1980/81	54,705	1.35	73,627	7,970	359	2,068	72,844	78.43	7,044
1981/82	55,497	1.33	73,906	7,044	342	1,690	73,229	77.10	6,373
1982/83 est.	53,540	1.24	66,481	6,373	616	1,200	66,411	68.37	5,859
1983/84 proj.	55,550	1.34	74,479	5,859	755	1,780	73,113	73.60	6,200
Wheat									
1979/80	32,528	1.50	48,921	12,986	3,497	350	54,720	60.25	10,334
1980/81	32,166	1.44	46,404	10,334	1,704	50	49,382	53.17	9,010
1981/82	32,324	1.59	51,459	9,010	4,621	100	53,346	56.17	11,644
1982/83 est.	32,502	1.64	53,223	11,644	6,629	150	56,768	58.45	14,588
1983/84 proj.	33,012	1.73	57,025	14,588	4,345	200	60,068	60.47	15,690
Coarse grains									
1979/80	44,775	.69	30,911	162	15	44	30,891	34.02	153
1980/81	44,538	.72	31,953	153	10	15	31,985	34.44	116
1981/82	45,240	.76	34,217	116	0	54	33,979	35.78	300
1982/83 est.	44,710	.69	30,997	300	0	3	31,154	32.07	120
1983/84 proj.	45,160	.75	33,769	120	0	5	33,684	33.91	200
Total cereals									
1979/80	131,062	1.08	141,063	23,267	4,657	1,910	148,620	163.65	18,457
1980/81	131,409	1.16	151,984	18,457	2,073	2,133	154,211	166.04	16,170
1981/82	133,061	1.20	159,582	16,170	4,963	1,844	160,554	169.05	18,317
1982/83 est.	130,752	1.15	150,691	18,317	7,245	1,353	154,333	158.89	20,567
1983/84 proj.	133,722	1.24	165,273	20,567	5,100	1,985	166,865	167.98	22,090

Sources: Official government data in each country, USDA and ERS estimates..sp .5

Table 2.—Supply and distribution of vegetable oils in South Asia

Marketing year (Nov./Oct.)	Area	Oilseeds Yield	Production	Opening stocks	Production	Imports	Exports	Disappearance Total	Per cap	Ending stocks
	1,000 ha	Tons/ha			1,000 tons				Kgs	1,000 tons
1979/80	29,234	.45	13,292	281	2,956	1,867	3	4,859	5.35	242
1980/81	29,528	.48	14,138	242	3,146	2,025	17	5,074	5.46	322
1981/82	30,916	.56	17,244	322	3,807	1,515	25	5,330	5.61	289
1982/83 est.	30,666	.51	15,791	289	3,594	2,014	25	5,549	5.71	323
1983/84 proj.	31,320	.54	16,779	323	3,797	2,086	30	5,814	5.85	362

Sources: Official government data in each country, USDA and ERS estimates.

needs. Imports of rice, primarily by Bangladesh and Sri Lanka, also increased during 1982/83. Rice exports fell to about 1.2 million tons, as low stocks constrained Indian exports and stiff price competition reduced sales by Pakistan.

Government-held cereal stocks in the region are expected to rise to over 20 million tons by July 1983. While stocks will remain below target, they generally will be at the highest levels since before the 1979/80 drought. Wheat stocks will improve substantially because of the larger 1982/83 imports and the outlook for another record crop in early 1983. Rice stocks will generally decline because of the drop in production and procurement. Food security considerations, primarily involving the maintenance of a balance between government food grain procurement, public distribution, and stock levels, continue to be a prominent aspect of regional agricultural policy (see article on South Asian public distribution systems).

Vegetable Oil Imports Fall in 1982, Rebound in 1983

Record or near-record oilseed harvests led to a decline in imports of vegetable oils in most of the region during

1981/82 (November/October). Oilseed output jumped 25 percent in India because of good weather and favorable producer prices, and Indian imports of edible oils dropped to a 6-year low. Production gains and import declines were less dramatic elsewhere in the region. Purchases of soybean oil generally dropped more sharply than palm oil purchases, particularly in India, because of highly competitive prices for Malaysian palm oil products.

In 1982/83, poor weather in key producing areas reduced oilseed production about 11 percent in India, offsetting marginal increases in the rest of the region. Regional imports of edible oils are expected to rebound to a record-matching 2 million tons in 1982/83. Indian imports will rise sharply to compensate for the production shortfall, while imports elsewhere will increase more gradually as growth in demand continues to outstrip production gains.

Cotton Exports Slump

South Asian cotton exports dropped 33 percent in 1981/82 (August/July), despite record cotton harvests by Pakistan and India, the region's major producers and exporters. Pakistan's exports fell because of stronger demand in its textile sector and reduced world demand

Table 3.—Supply and distribution of cotton in South Asia

Marketing year (August/July)	Area	Yield	Production	Opening stocks	Imports	Exports	Domestic disappearance	Ending Stocks
	1,000 ha	Kg/Ha			1,000 480-lb bales			
1979/80	10,200	212	9,933	3,693	248	1,691	8,700	3,483
1980/81	9,990	212	9,709	3,483	258	2,112	8,984	2,354
1981/82	10,300	219	10,365	2,354	282	1,423	9,090	2,488
1982/83 est.	10,341	222	10,553	2,488	254	1,603	9,428	2,264
1983/84 proj.	10,375	228	10,884	2,264	279	1,653	9,857	1,917

Sources: Official government data in each country, USDA and ERS estimates.

Table 4.—Supply and distribution of centrifugal mill sugar in South Asia

Marketing year (Oct./Sep.)	Area	Sugarcane Yield	Production	Opening stocks	Production	Centrifugal mill sugar ¹				Ending stocks
	1,000 ha	Tons/ha			1,000 tons	Imports	Exports	Disappearance Total	Per cap	1,000 tons
1979/80	3,574	45.83	163,780	2,340	4,802	752	243	6,845	7.54	806
1980/81	3,674	52.78	193,915	806	6,549	538	70	6,653	7.16	1,170
1981/82	4,334	52.62	228,063	1,170	10,592	284	407	7,572	7.97	4,067
1982/83 est.	4,226	51.99	219,705	4,067	9,800	292	580	8,269	8.51	5,310
1983/84 proj.	3,996	49.61	198,225	5,310	8,530	352	850	9,049	9.11	4,293

¹Centrifugal mill sugar at 96 degrees polarity.

Sources: Official government data in each country, USDA and ERS estimates.

for raw cotton. India's exports fell, despite a sharp drop in mill consumption, as the Government lowered export quotas to improve cotton stocks. Current estimates indicate little recovery in regional cotton exports in 1982/83. Indian exports are expected to reach near-record levels as weak domestic demand leads to highly competitive export prices, but Pakistani sales will likely continue to slip because of strong domestic and weak world demand.

Sugar Production and Stocks

Post Huge Gains

South Asian production of centrifugal mill sugar jumped 62 percent in 1981/82 (October/September), with India emerging as the world's largest producer. Throughout the region, favorable weather and higher producer prices led to record sugarcane plantings and harvests, and attractive mill prices resulted in a record portion of the crop being crushed. After 2 years of tight supplies, particularly in India, the region once again became a net sugar exporter, and stocks rose to over 50 percent of consumption. In 1982/83, weakening prices and poor weather reduced plantings, but the outturn is still expected to be the second largest on record. Despite projected large increases in consumption, sugar stocks will likely rise to over 60 percent of domestic use by October 1983. Efforts to significantly reduce the surplus through exports have been thwarted by stiff competition in world markets, and global prices that are generally below South Asian production costs.

Policies Promote Higher Grain And Oilseed Output

Balance of payments pressures and stagnating per capita production throughout South Asia appear to be prompting additional emphasis on the production of food grains and, more recently, oilseeds. While stable consumer prices have historically been a key feature of South Asian food policy, recent policy adjustments have led to

improved producer price incentives, particularly for wheat, rice, and oilseeds. Programs to increase fertilizer production, aided by the recent stability of raw material prices, have succeeded in substantially improving fertilizer availabilities in the region and in laying the groundwork for future gains in fertilizer use. Improved irrigation facilities, vital to reducing the chronic instability of South Asian agricultural production, continue to be a priority for investment in the region's farm sectors. Additions to irrigation capacity in the region have risen to nearly 3 million hectares per year. In both India and Pakistan, current development plans call for substantial increases in resources for boosting production of oilseeds and pulses, crops that were largely neglected in previous plans.

U.S. Farm Exports to South Asia At Record Level

U.S. farm exports to South Asia are expected to jump to a record \$1.32 billion in U.S. fiscal year 1983, nearly double fiscal 1982. The increase stems primarily from larger purchases of U.S. wheat, particularly by India. Exports of wheat will likely more than double to about 5.6 million tons because of the region's poor rice and coarse grain harvests in 1982/83 and the need to rebuild stocks. While India's purchases of U.S. wheat for fiscal 1983 have probably been completed, exports to Bangladesh may increase further if additional concessional financing can be arranged. A poor wheat crop in Australia, a traditional supplier to the region, has helped boost the U.S. share of the South Asian wheat market.

A poor 1982/83 oilseed harvest in India and continued strong growth in vegetable oil demand are expected to boost U.S. soybean oil exports to each South Asian country. U.S. soybean oil exports to the region are currently forecast to rise 27 percent in fiscal 1983. Shipments to Pakistan are expected to rise 23 percent. Pakistan has been the largest South Asian market for U.S. soybean oil since Brazilian soybean oil began to dominate the Indian

**Table 5.—U.S. agricultural exports to South Asia
(U.S. fiscal years)**

	1979/80	1980/81	1981/82	1982/83 forecast
<i>Million dollars</i>				
Afghanistan	0	—	.1	—
Bangladesh	228.4	74.9	121.7	187.4
India	367.3	324.0	309.9	773.0
Nepal	7.4	3.2	2.2	5.0
Pakistan	161.3	147.0	218.0	291.2
Sri Lanka	30.5	48.5	51.7	64.8
Total	794.9	597.6	703.6	1,321.4

— Less than \$50,000.

Sources: U.S. Department of Commerce, Bureau of the Census; ERS forecasts.

**Table 6.—U.S. exports of wheat and products
to South Asia (U.S. fiscal years)**

	1979/80	1980/81	1981/82	1982/83 forecast
<i>1,000 tons</i>				
Afghanistan	0	0	0	0
Bangladesh	1,153.0	308.9	420.6	800.0
India	314.8	948.2	1,320.9	4,150.0
Nepal	36.1	10.3	4.0	10.0
Pakistan	205.1	182.4	234.1	300.0
Sri Lanka	148.0	268.3	305.0	350.0
Total	1,857.0	1,718.1	2,284.6	5,610.0

Sources: U.S. Department of Commerce, Bureau of the Census; ERS forecasts.

**Table 7.—U.S. exports of soybean oil
to South Asia (U.S. fiscal years)**

	1979/80	1980/81	1981/82	1982/83 forecast
<i>1,000 tons</i>				
Afghanistan	0	0	0	0
Bangladesh	20.9	25.3	34.0	40.0
India	427.7	61.8	68.4	100.0
Nepal	.3	.5	.1	.4
Pakistan	147.4	125.7	259.9	320.0
Sri Lanka	.8	.5	.5	1.6
Total	597.1	213.8	362.9	462.0

Sources: U.S. Department of Commerce, Bureau of the Census; ERS forecasts.

market in 1981. Relative prices for competing oils, primarily Brazilian soybean oil and Malaysian palm oil, will be important in determining the actual level of U.S. soybean oil exports to the region.

While wheat and soybean oil typically account for over 80 percent of U.S. farm exports to South Asia, other significant items include inedible tallow and cotton. Exports of inedible tallow are forecast to shrink by about 13 percent to \$45 million in fiscal 1983, as purchases by Pakistan, the region's major market, fall below the

record 1982 level. Exports of U.S. cotton to the region are primarily to Bangladesh on concessional terms and are forecast to expand 70 percent to about \$42 million.

Normal Monsoon Should Fuel Strong Growth in 1983/84

With an average monsoon, most South Asian economies should rebound strongly in 1983/84. Early monsoon rainfall has been near average throughout most of the region. Improved availabilities of fertilizer and irrigation inputs, coupled with favorable producer prices, should be conducive to record or near-record production of most farm commodities. Recent improvements in industrial capacities and infrastructural services, together with a recovery in farm output, should lead to stronger performance in the industrial sector. Stable petroleum prices will likely assist the recovery of farm and industrial production, and help moderate the general rate of inflation. Food prices, however, may continue to rise in real terms because of strong demand and higher administered prices.

Current projections show a 10-percent increase in total South Asian cereal production in 1983/84 and an 8-percent recovery in consumption. Regional cereal imports are projected to fall to 5.1 million tons, including 4.3 million tons of wheat, but even this level would still allow further improvement in government-owned stocks of wheat and rice. Strong open-market cereal prices prevailing in the region in early 1983 could, however, jeopardize stock building and boost imports by increasing distribution requirements even more than currently expected.

Oilseed production is projected near the 1981/82 record in 1983/84, and vegetable oil imports are expected to show a small increase to about 2.1 million tons. Cotton production is projected at a record of nearly 11 million bales. Pakistan is expected to have a substantial increase in exportable supplies of raw cotton, while a recovery in mill demand in India should lead to lower Indian exports. Huge sugar stocks probably will result in reduced 1983/84 sugarcane plantings, particularly in India, and lead to a decline in regional production. Sugar stocks will likely remain high, however, despite projected gains in consumption and exports.

Assuming an average monsoon, farm commodity imports should decline throughout most of the region, while exportable supplies increase. With the outlook for stable petroleum import costs and a moderate recovery in export markets, most South Asian economies are expected to show some improvement in their balance of payments positions in 1983/84. Balance of payment deficits are, however, projected to remain large. It is likely that import substitution and export expansion programs, including those affecting the region's farm sectors, will remain a key focus of economic policy. [Rip Landes (202) 447-8860]

BANGLADESH

Poor Monsoon and Financial Problems Slow Growth

Buffeted by high interest rates, a volatile exchange rate, and a second straight monsoon failure, real gross

domestic product (GDP) grew only an estimated 2.4 percent in Bangladesh fiscal year 1983 (July 1982/June 1983). This was slightly above the fiscal 1982 performance, but just half the average of the previous 5 years. Faced with continued financial and economic difficulties,

the Government was forced to make decisions that, coupled with a good 1983 winter food grain crop, have helped alleviate some of the more serious economic and financial imbalances. The more important steps were a pruning back of an overly ambitious development budget, an 18-percent devaluation of the taka in January 1983, and a 10-percent planned reduction in imports. The restrictions on imports, however, helped reduce growth in the industrial sector to 3.6 percent.

The monsoon failure of 1982 resulted in a sharp jump in food grain prices. Mirroring the unstable price movements of 1981, retail prices for coarse rice averaged \$299 per ton in October 1982, up 21 percent from June. The Government attempted to stem the potentially destabilizing effect of the price swing with increased public distribution of food grains and emergency imports. However, public distribution levels proved to be inadequate, and imports did not arrive on a timely basis. Generous imports at the end of 1982 and early 1983, coupled with the expectation of a record 1983 food grain crop, finally tempered the price rise by February 1983.

The Government, which lost a major credit line with the IMF in 1981, continued to receive IMF emergency and import credit assistance. However, because of Bangladesh's past record of not fully implementing previous development budgets, IMF assistance was pared back to a level that the Government could realistically absorb. The Government benefited from a 10-percent increase in aid commitments in fiscal 1983, as donors recognized the nation's desperate situation. Because of domestic policy initiatives and increased donor assistance, the Govern-

ment of General Ershad was able to stabilize the political, financial, and economic situation that began to unravel with the assassination of General Zia in 1981, and the year ended with a great deal more economic stability than it began.

Import Restrictions Reduce Trade Deficit

Bangladesh's export earnings increased only 4 percent to \$655 million in fiscal 1983 because of continued slow demand for raw jute and jute manufactures. A shortage of foreign exchange led to a 10-percent decline in total imports to \$2.34 billion. Petroleum imports alone dropped more than \$150 million, about offsetting an increase in food grain imports. Other imports showing large decreases included fertilizer (down 36.5 percent because of increased domestic production), raw cotton, and transport equipment (down 13 percent due to foreign exchange constraints). The smaller trade deficit and a \$200 million gain in worker remittances reduced the current account deficit by nearly \$300 million to \$1.6 billion. However, foreign exchange reserves remained low at \$180 million, well below the average of the last 5 years.

Good Winter Harvest Helps Offset Poor Monsoon

Cereal production increased by 4.6 percent to 15.3 million tons in 1982/83. Rice production rose 4 percent as a record winter (Boro) crop, offset a drought-induced shortfall in the summer (Aman) crop. The Government's program to improve the availability of irrigation and fertilizer, however, paid off in higher yields for winter food grains. Wheat yields rose 15 percent from 1982/83, and winter rice yields held near the record 1981/82 level despite an 18-percent increase in area.

Table 8.—Economic indicators for Bangladesh

	FY75-FY80 Average	FY81	FY82 est.	FY83 est.
<i>Gross domestic product (billion taka)</i>				
Current prices	131.4	196.0	219.4	261.8
(% change)	(7.9)	(12.1)	(11.9)	(19.3)
1972/73 Prices	61.7	73.3	74.1	75.9
(% change)	(5.3)	(6.0)	(1.1)	(2.4)
Ag. sector share(%)	(55.2)	(53.6)	(53.6)	(54.0)
<i>Indices of production</i>				
Agriculture: (1969-71=100)	107.0	121.0	120.0	123.0
(% change)	(3.2)	(6.1)	(-8)	(2.5)
Industry: (1973/74=100)	118.2	144.8	144.9	148.2
(% change)	(6.8)	(8.3)	(.1)	(2.3)
<i>Wholesale price index (1969/70=100)</i>				
All items	412.6	541.0	608.6	650.9
(% change)	(5.5)	(7.9)	(12.5)	(7.0)
Food items	413.9	548.2	619.2	643.6
(% change)	(4.8)	(4.2)	(13.0)	(3.9)
<i>Consumer price index (1973/74=100)</i>				
All items	178.6	255.0	296.5	324.5
(% change)	(6.6)	(12.5)	(16.3)	(9.4)
Food items	176.5	236.4	288.1	312.1
(% change)	(5.7)	(5.4)	(21.9)	(8.3)
<i>Population (millions)</i>				
	83.33	90.68	93.04	95.45
(% change)	(2.41)	(2.61)	(2.60)	(2.59)

Note: Data are for Bangladesh fiscal years. FY83 is year ending June 30, 1983.

Sources: Government of Bangladesh, World Bank, International Monetary Fund, ERS estimates.

Table 9.—Production of principal crops in Bangladesh¹

	1980/81	1981/82	1982/83 est.	1983/84 proj.
<i>1,000 tons</i>				
Rice	13,882	13,631	14,170	14,500
Wheat	1,092	967	1,100	1,200
Coarse grains	52	51	51	51
Cereals	15,026	14,649	15,321	15,751
Jute	897	843	840	840
Sugarcane	6,599	7,136	7,000	7,000
Tea	36	39	41	41

¹Production reported by Bangladesh crop years.

Sources: Government of Bangladesh, USDA and ERS estimates.

Jute production is expected to remain stagnant in 1982/83 because recent price relationships have favored rice cultivation.

Food Grain Imports Soar

To sustain historical annual consumption levels (177 kilograms per capita over the past 5 years), which were threatened by poor weather and population growth, the Government nearly doubled food grain imports in 1982/83 to 2 million tons. Food grain imports are valued at \$450 million in 1982/83, nearly 20 percent of total imports. Because of economic difficulties, donor nations were not able to quickly plug the production shortfall.

Hence, Bangladesh, though historically dependent on concessional sources for 85 percent of its food grain imports, purchased over 40 percent of its 1982/83 food grain imports on commercial terms by starving other import sectors. Despite the higher imports and the record winter harvest, food grain stocks at the end of June 1983 amounted to only 709,000 tons, less than 3 weeks' consumption.

Cotton imports in 1982/83 were stagnant at 44,000 tons, because of foreign exchange constraints. About 40 percent of total cotton imports came from the United States (all concessional), with Pakistan and the Soviet Union the other major suppliers. U.S. farm exports to Bangladesh, boosted by low food grain prices and the blended credit program, are estimated at \$215 million in U.S. fiscal year 1983, nearly double the previous year's level. U.S. wheat exports jumped to an estimated 800,000 tons in fiscal 1983, compared with 420,000 tons the previous year.

Farm Policy Initiatives

Boost Producer Incentives

During the last year, Bangladesh significantly modified its procurement program to improve producer incentives. In July 1982, the subsidized issue price of coarse rice exceeded the producer procurement price, for the first time in the 8-year history of the procurement program. The program modifications have resulted from encouragement by donors, particularly the United States, to boost producer incentives by raising the procurement price and by raising the issue price at a faster rate to reduce food grain subsidies.

Prospects for Growth Brighter in 1984

With a normal 1983 monsoon, GDP should grow 3-5 percent in fiscal 1984. The industrial sector will likely remain sluggish because of the higher import costs resulting from devaluation, and a planned import austerity program. Failing an unexpectedly sharp jump in jute exports, balance of payments problems will continue to constrain imports for the industrial and service sectors. As a result, growth in most important industrial and service subsectors is expected to remain slow.

The food grain supply situation is expected to remain tight in fiscal 1984. To maintain per capita consumption and stocks near fiscal 1983 levels, large food grain imports totaling about 1.5 million tons will again be needed to supplement expected production and procurement. It is unlikely that the Government will be able to build stocks much beyond the uncomfortably low levels of fiscal 1983.

Exports of jute goods are projected to increase about 13 percent to \$455 million, assuming a modest world recovery and a boost provided by devaluation. This increase, coupled with gains in exports of leather goods and frozen shrimp, are expected to lead to a 15-percent rise in total export earnings, to \$750 million, in fiscal 1984. Total imports are expected to reach \$2.6 billion, leaving a merchandise trade deficit of \$1.9 billion, up 11 percent. Aid disbursements are projected to reach \$1.4 billion. Growth in project aid is expected to offset a small decline in commodity assistance, as donor nations continue to have problems financing high levels of concessional commodity assistance. [Richard F. Nehring (202) 447-8230]

Table 10.—Wheat and rice imports by Bangladesh by source and type of financing (July/June)

	Commercial			Concessional			Total		
	1980/81	1981/82	1982/83	1980/81	1981/82	1982/83	1980/81	1981/82	1982/83
1,000 tons									
Wheat									
Australia	—	—	—	78	112	49	78	112	49
Belgium	—	—	—	5	—	—	5	—	—
Canada	—	—	—	141	100	445	141	100	445
EEC	—	—	187	105	130	150	105	130	337
France	—	—	—	13	13	14	13	13	14
India	—	—	103	—	—	—	—	—	103
Netherlands	—	—	—	24	—	—	24	—	—
United Kingdom	—	—	—	28	—	5	28	—	5
United States	260	—	529	274	452	355	534	452	600
West Germany	—	—	—	25	25	25	25	25	25
World Food Program	—	—	—	40	278	86	40	278	86
Total	260	0	819	733	1,110	1,129	993	1,110	1,664
Rice									
Australia	—	—	—	—	—	17	—	—	17
Burma	—	—	45	—	15	—	—	15	45
Japan	—	—	—	84	17	142	84	17	142
Pakistan	—	99	—	—	—	—	—	99	—
Thailand	—	—	40	—	—	—	—	—	40
United States	—	—	—	—	—	92	—	—	92
World Food Program	—	—	—	—	13	—	—	13	—
Total	0	99	115	84	45	251	84	144	336

— = None or negligible.

¹Purchased by Japan for Bangladesh.

Sources: Government of Bangladesh, FAS.

Decline in Agricultural Production Sets Back Economy

After 2 years of broad-based and above-trend expansion, real growth in the Indian economy slowed to about 2 percent during Indian fiscal year 1983 (April 1982/March 1983). The slowdown was due to an estimated 6-percent decline in agricultural production because of drought. Following record farm sector production in 1981/82, the 1982 monsoon arrived late, performed sporadically, and withdrew early from key producing areas of the subcontinent, leading to a sharp decline in 1982/83 kharif (fall) harvests of rice, coarse grains, and oilseeds. Normal winter rainfall, irrigation protection, and sustained growth in input use are expected lead to record rabi (spring) harvests and to prevent the setback in the farm sector from approaching the 15-percent decline caused by the severe 1979/80 drought.

Table 11.—Economic indicators for India

	FY75-FY80 Average	FY81	FY82 est.	FY83 est.
<i>Gross domestic product (Rs. billion)</i>				
Current prices	774.0	1,142.7	1,304.6	1,344.0
(% change)	(8.5)	(20.4)	(14.2)	(3.0)
1970/71 prices	446.9	506.8	533.4	544.1
(% change)	(4.2)	(7.9)	(5.2)	(2.0)
Ag. sector share (%)	(38.4)	(35.5)	(34.1)	(33.5)
<i>Indices of production</i>				
Agriculture: (1969-71=100)	122.9	134.9	142.6	134.0
(% change)	(2.3)	(15.0)	(5.7)	(-6.0)
Industry: (1970=100)	135.25	154.0	167.3	174.8
(% change)	(5.4)	(4.0)	(8.6)	(4.5)
<i>Wholesale price index (1970/71=100)</i>				
All items	185.6	257.3	281.3	288.0
(% change)	(3.9)	(18.2)	(9.3)	(2.4)
Food items	170.7	208.0	235.0	249.0
(% change)	(1.9)	(11.2)	(13.0)	(6.0)
<i>Consumer price index (1960=100)</i>				
All items	324.3	401.0	451.0	479.0
(% change)	(2.5)	(11.4)	(12.5)	(6.0)
Food items	346.8	419.0	476.0	502.0
(% change)	(1.0)	(12.3)	(13.6)	(5.5)
<i>Population (millions)</i>				
	655.22	707.84	723.05	738.60
(% change)	(2.26)	(2.25)	(2.15)	(2.15)

Note: Data are for Indian fiscal years. FY83 is year ending March 31, 1983.

Sources: Government of India, International Monetary Fund, ERS estimates.

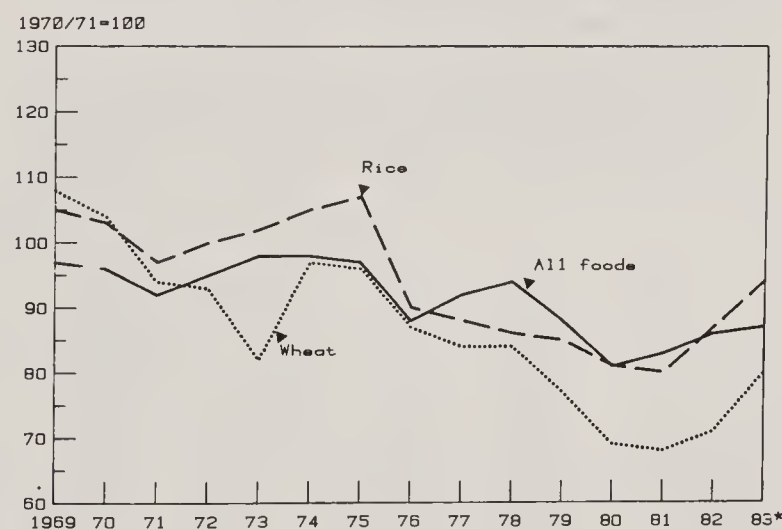
Growth in India's industrial sector slowed to about 4.5 percent in fiscal 1983, following a strong 8.6-percent increase the year before. Industrial expansion continued to be widespread, but many industries were unable to match their fiscal 1982 performance, in part because of slackened demand, particularly for nonfood items. Infrastructural services, including coal production and transportation, which have been traditional bottlenecks in the Indian economy, continued to improve. Power generation increased by about 10 percent, but shortfalls in

hydroelectric power generation contributed to continued and significant shortages in some areas. The only major decline within the industrial sector occurred in the textile industry, because of a sustained strike by mill workers in the key textile center of Bombay.

Cereal Prices Rise in Real Terms

Overall, wholesale and consumer prices remained relatively stable during fiscal 1983 because of slowed demand growth, stable energy costs, and cautious monetary policy. However, despite an additional 4 million tons of wheat imports and increased allocations of cereals to the public distribution system, rising prices for cereals, particularly rice and wheat, were a major source of inflation in the economy for the first time since 1974. During 1982, wholesale prices for rice and wheat increased 4 and 9 percent, respectively, in real terms and continued to rise during early 1983. By contrast, no real increase in cereal prices occurred following the more severe 1979/80 drought, largely because of sharp hikes in energy costs that were passed through the economy at that time. Higher real cereal prices during 1982 and 1983 reflect increases in administered fertilizer prices and in the procurement and issue prices of cereals, as well as drought-induced shortages emerging in some areas. Prices of sugar and edible oils, both of which contributed to overall food price rises in 1980 and 1981, declined in real terms in 1982, following record domestic production.

Deflated Wholesale Price Indices for Wheat, Rice and All Foods in India



* January-May.

Sources: Government of India, ERS estimates.

Balance of Payments Pressures Continue

During fiscal 1983, India's trade deficit fell to about \$6 billion, compared with the previous year's \$6.7 billion, as exports grew by about 3.4 percent and imports fell by 3 percent. Large trade and current account deficits, however, continued to pressure India's balance of payments position. The deficits necessitated additional commercial and concessional borrowing, including \$2 billion in scheduled drawings from an IMF Extended Fund Facility, to prevent a further decline in foreign reserves. The

reduction of trade and current account deficits, which rose sharply in 1980 because of more liberal import policies; a jump in petroleum import costs; and insufficient growth in export earnings continued to be a key focus of Indian economic policy. The IMF facility, negotiated in 1981, has helped finance a program of adjustment. The program involves efforts to expand exports and substitute for major imports, both of which involve the farm sector, as well as the continued liberalization of industrial imports in order to provide needed inputs and capital goods.

Food Grain Production Down Sharply From 1981/82 Record

After reaching a record 133.1 million tons in 1981/82, Indian food grain production declined 5 percent to an estimated 126 million tons in 1982/83. The bulk of the decline occurred in the kharif rice harvest, which is most vulnerable to deficiencies in monsoon rainfall. Rice area and yields were down sharply in important producing areas of eastern and southern India. However, irrigation protection and reduced pest and disease problems allowed a further large increase in rice production in the key surplus state of Punjab. The 1982/83 rabi harvests, primarily wheat and pulses, benefited from normal weather and increased from 1981/82 levels. The spring 1983 wheat crop is estimated at 41.0 million tons—a third consecutive record. Wheat yields continue to show a strong upward trend, particularly in the northern states of Punjab, Haryana, and Uttar Pradesh. Yield gains have resulted from the expansion of irrigation facilities and fertilizer and pesticide use, as well as continued varietal improvements.

Government Cereal Supplies Tight Despite Wheat Imports

Government stocks of cereals increased during 1982, but remained below target. Imports of U.S. and Australian wheat totaling 2.4 million tons were made during 1981/82 (July/June) to assist in rebuilding government

stocks after the severe 1979/80 drought led to reduced domestic procurement and a sharp increase in public distribution. Imported wheat, coupled with record rice procurement and near-record wheat procurement in 1981/82, led to a rise in stocks from a 6-year low of 13.6 million tons in July 1981 to 15.3 million in July 1982. Wheat stocks improved substantially, but rice stocks fell as rice distribution was increased to conserve wheat. Total stocks, however, remained well below the July 1 target of 21-24 million tons. With a poor monsoon in progress and the need to ensure adequate cereal supplies for public distribution, the Government bought 3.95 million tons of additional U.S. wheat in August and November 1982.

With the additional wheat imports, and current estimates of 1982/83 procurement and public distribution, stocks are expected to increase further to about 17.6 million tons by July 1983. Despite the poor overall 1982/83 rice crop, rice procurement was relatively successful because of record production in the principal surplus state of Punjab; procurement is expected to total 6.8 million tons. Wheat procurement from the 1983 crop is forecast at a record 8.3 million tons (see table in article on public distribution systems in South Asia).

Cereal allocations to the public distribution system are expected to reach record levels during 1983 because of the decline in rice production and rising open-market prices. Wheat distribution will likely increase considerably to conserve dwindling rice stocks. Exports of rice are expected to drop off to about 275,000 tons in 1982/83 because of tight supplies. During June and July 1983, the Government reportedly purchased about 120,000 tons of Thai and Burmese rice to help meet public distribution needs in several southern states. Rice imports are expected to total about 300,000 tons in 1983/84. Larger-scale rice imports are not expected unless there is another poor rice crop in 1983/84. Although projected cereal procurement should be sufficient to meet distribution requirements and to allow some stock building during 1983/84, additional wheat imports are possible, particularly if the Government intends to build buffer stocks closer to the targeted level. A decision on further wheat imports will likely wait until late 1983, when a more

Table 12.—Area and production of principal crops in India¹

	1979/80	1980/81	Area 1981/82	1982/83 est.	1983/84 proj.	1979/80	1980/81	Production 1981/82	1982/83 est.	1983/84 proj.
			1,000 ha.					1,000 tons		
Rice	39,414	40,152	40,706	39,000	40,500	42,330	53,631	53,593	46,000	53,000
Wheat	22,172	22,104	22,308	22,700	22,900	31,830	36,313	37,833	41,000	42,500
Coarse grains	41,361	41,779	41,935	41,450	41,850	26,969	29,018	30,285	27,400	30,000
Cereals	102,947	104,035	104,949	103,150	105,250	101,129	118,962	121,711	114,400	125,500
Pulses	22,259	22,457	23,871	24,000	24,000	8,572	10,627	11,351	12,000	12,000
Food grains	125,206	126,492	128,820	127,150	129,250	109,701	129,589	133,062	126,000	137,500
Castorseed	440	498	558	525	575	227	204	302	250	300
Peanuts	7,165	6,801	7,448	7,200	7,400	5,768	5,005	7,239	5,500	6,300
Rapeseed	3,471	4,113	4,337	4,350	4,400	1,428	2,002	2,363	2,500	2,500
Cottonseed	8,078	7,823	7,987	7,966	8,000	2,643	2,700	2,800	2,800	2,850
Sesameseed	2,337	2,472	2,521	2,470	2,500	348	446	524	475	500
Soybeans	400	392	401	450	500	350	442	464	470	500
Sunflower	61	119	228	375	450	32	66	131	225	275
Oth. oilseeds ²	4,003	4,072	4,199	4,162	4,175	989	1,242	1,390	1,360	1,365
Oilseeds	25,955	26,290	27,679	27,498	28,000	11,785	12,107	15,213	13,580	14,590
Sugarcane	2,670	2,667	3,192	3,150	2,900	128,833	154,248	183,647	177,000	155,000
Cotton ³	8,078	7,823	7,987	7,966	8,000	6,011	6,090	6,400	6,320	6,500

¹Data reported by Indian production years (July/June). ²Flaxseed, safflower, nigerseed, and copra. ³Cotton production in 1,000 480-lb bales.

Sources: Government of India, USDA and ERS estimates.

reliable estimate of the 1983/84 food grain harvest can be made.

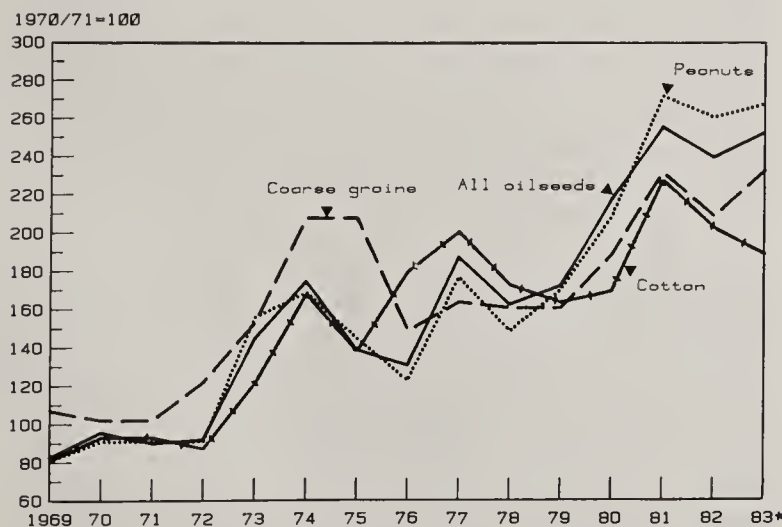
Farm Policy Continues To Promote Food Grain Production

Indian farm policy continues to focus on the expansion of food grain production. Investments in fertilizer production capacity have led to substantial gains in domestic production and improved availabilities. Fertilizer prices stabilized in 1982, following substantial increases in real terms in both 1980 and 1981. The expansion of irrigation facilities is a key element of the current 5-year plan, and an additional 2.4 million hectares, much of it planted to food grains, have come under irrigation in each of the last 3 years. Price policy, implemented through the establishment of procurement prices, is effective in ensuring minimum producer prices. The pressing need to assure stable consumer cereal prices and to control the budgetary costs of subsidies has constrained real increases in procurement prices. However, with a slowdown in the general rate of inflation, the procurement prices set for the 1982/83 rice and wheat crops provide the first real increases in producer incentives in recent years. The current 5-year plan also places new emphasis on pulse production. The production of pulses, an important source of vegetarian protein, has stagnated in recent years because of a lack of varietal improvements and the greater profitability of competing crops.

Record Oilseed Crop Cuts 1982 Oil Imports

Oilseed production totaled a record 15.2 million tons in 1981/82, 17 percent above the previous record outturn, on the strength of record plantings and yields. The peanut crop reached 7.2 million tons, 7 percent above the previous record, largely because of the rapid expansion in irrigated land planted to peanuts during the rabi season in Andhra Pradesh, Tamil Nadu, and Gujarat. Production of rapeseed, which is grown during the rabi season in northern India, was also a record, with the availability of new, shorter duration varieties continuing to trigger rapid growth in plantings.

Wholesale Price Indices for Peanuts, All Oilseeds, Coarse Grains, and Cotton in India



* January-May.
Sources: Government of India, ERS estimates.

Favorable weather was instrumental in boosting oilseed harvests during 1981/82, but higher oilseed prices and the implementation of government plans to increase oilseed production probably also had an impact. Oilseed production languished throughout the 1970's because of the lack of varietal breakthroughs, government emphasis on the food grain sector, and unremunerative producer prices. During 1979-81, for the first time in recent years, oilseed prices strengthened relative to those for competing coarse grain and cotton crops and may have influenced the widespread increases in plantings and yields during 1981/82.

The strengthening of oilseed prices stemmed from the strong growth in domestic demand for edible oils and from government policies that control the import and utilization of vegetable oils. All vegetable oil imports are canalized through the Government's State Trading Corporation (STC), which limits the level of imports. The STC resells imported oils at prices that are above import prices, although somewhat below comparable domestic oils. Regulations also restrict the use of imported oils in vanaspati (hydrogenated vegetable oil) production, a practice that boosts demand and prices for domestic oils. In an effort to reduce the import bill for edible oils—one of India's largest import items—government programs have begun to channel more resources into the oilseed sector. Key elements of the programs include increasing oilseed cultivation on irrigated land, more emphasis on varietal improvements, and improvement of seed quality and cultural practices.

Because of the record oilseed crop, 1982 edible oil production was a record 3.3 million tons, 25 percent above 1981. Oilseed and oil prices fell in nominal and real

Table 13.—Supply and distribution of vegetable oils in India

	1980	1981	1982 est.	1983 est.	1984 proj.
1,000 tons					
Beginning stocks	230	160	170	180	180
Production					
Coconut	215	213	214	211	211
Cottonseed	211	224	237	239	247
Flaxseed	78	115	137	137	137
Groundnut	1,339	1,177	1,619	1,331	1,443
Rapeseed	428	601	709	750	750
Sesame	102	135	159	144	152
Soybean	55	69	73	73	77
Other ¹	101	135	178	205	233
Total	2,529	2,669	3,326	3,090	3,250
Imports					
Coconut	3	70	0	0	0
Palm	555	453	418	575	600
Rapeseed ²	126	114	80	125	100
Soybean	660	653	385	550	550
Other ³	12	49	0	0	0
Total	1,356	1,339	883	1,250	1,250
Exports	0	0	0	0	0
Domestic disappearance	3,955	3,998	4,199	4,340	4,500
Ending stocks	160	170	180	180	180

¹Includes nigerseed, safflower, and sunflower oils. ²Includes small amounts of rapeseed as oil. ³Includes cottonseed, palm kernel, and sunflower oils.

Sources: USDA and ERS estimates.

terms for the first time in recent years and domestic disappearance of edible oils jumped 5 percent. Total oil imports dropped to about 883,000 tons, and soybean oil purchases to 385,000—both the lowest since before large-scale imports began in 1977. Soybean oil imports fell sharply because of smaller requirements for the vanaspati industry, the major user of imported soybean oil, and because delivered prices for processed Malaysian palm oil fell below those of soybean oil during late 1982. U.S. exports of soybean oil to India continued to decline and totaled only 35,700 tons, as lower priced Brazilian oil maintained its dominate share of the Indian market.

Drought-Reduced 1982/83 Oilseed Harvest to Boost Oil Imports in 1983

The weak 1982 monsoon reduced oilseed plantings and yields in important kharif-producing areas, leading to an estimated 11-percent decline in total oilseed production in 1982/83. Peanut production is estimated to have fallen to 5.5 million tons, primarily because of very poor planting and growing conditions in the main kharif peanut producing state of Gujarat. Rabi production of rapeseed and peanuts, however, is expected to have continued its recent expansion because of irrigation protection. Despite the decline in oilseed prices during 1982, prices for oilseeds relative to competing crops, particularly cotton, remained conducive to oilseed planting.

Edible oil production is estimated at 3.1 million tons for 1983. Higher prices for oilseeds and products observed in early 1983 are expected to continue because of the shortfall in kharif production. The high prices may also dampen growth in consumption. Current estimates suggest a 3- to 4-percent increase in consumption and a rebound in imports to about 1.25 million tons in 1983. Depressed world vegetable oil prices may be conducive to larger purchases, but the need to sustain producer price incentives and hold down the import bill could constrain the actual level of imports. Imports of soybean oil are forecast to rise to 550,000 tons to meet the requirements of the vanaspati industry. Imports of palm oil are likely to continue to account for a larger-than-normal share of total imports and are forecast at 575,000 tons. Delivered prices for palm oils continued to be highly competitive in early 1983, and demand for edible oils through the public distribution system, the principal distribution channel for palm oil, is likely to increase. It is expected that all 1983 purchases will be made by the STC in the open market, and a recovery in U.S. soybean oil sales will hinge on price competitiveness.

Huge 1981/82 Sugar Outturn Overhangs Market

India emerged as the world's largest producer of sugar in 1981/82 (October-September), as good weather and a sharp upswing in producer prices following the 1979/80 drought led to record sugarcane plantings and yields. Sugarcane production rose 19 percent from 1980/81, to 184 million tons, and production of milled sugar surged to nearly 9 million tons, a 64-percent increase. The proportionally larger increase in milled sugar production occurred because of the diversion of a larger share of the cane crop to sugar mills offering statutory minimum prices. During 1979-81, an average of 34 percent of sugarcane production was crushed by sugar mills, while

the remainder went to produce gur (non-centrifugal, brown, lump sugar produced on the farm) and khandsari (centrifugal, semiwhite sugar produced in small and unregulated plants), and for seed and wastage. However, as gur and khandsari prices plunged during the 1981/82 crushing season, the minimum price offered by sugar mills became attractive, and about 52 percent of the record cane crop was crushed by mills. After 2 years of tight domestic supplies and uncharacteristic sugar imports, consumption jumped 16 percent, exports were resumed, and sugar stocks rose to 3.5 million tons—56 percent of domestic consumption. Attempts to reduce the huge sugar surplus through exports were hindered by competition from other exporters and world prices below Indian production costs. Exports of about 375,000 tons, primarily to Indonesia, China, and Egypt, were below India's International Sugar Organization quota of 690,000 tons.

Declining prices and poor weather reduced new sugarcane plantings somewhat during 1982, but irrigation protection and large remaining stands of ratooned cane led to another good crop in 1982/83. Cane production is estimated at 177 million tons in 1982/83, and milled sugar output at 8.3 million tons, the second largest outturn on record. Sugar consumption is expected to rise 9 percent, and exports are projected at about 530,000 tons, but sugar stocks will continue to rise to about 4.7 million tons.

In the absence of effective measures to control the extreme variability of domestic sugar prices, Indian sugar production will continue to be highly cyclical. The huge stocks of sugar accumulated during 1982 and 1983 are likely to lead to a sharp downswing in sugarcane prices and plantings in 1983/84. The Government is attempting to expand exports and announced the formation of a 500,000-ton buffer stock to remove some sugar from the market in 1982, but these measures have proved both costly and ineffective in dealing with the current surplus.

Cotton Exports To Rise As Strike Reduces Mill Consumption

Indian cotton production rose to a record 6.4 million bales (480 pounds each) in 1981/82 (August/July) because of favorable weather in the major producing state of Gujarat and the continued expansion of area under high-yielding, long staple cottons. Consumption declined to about 6 million bales because of a sustained strike by mill workers in Bombay, and lower export quotas led to a decline in exports from a record 544,000 bales in 1980/81 to 273,000 in 1981/82. Cotton stocks, which were drawn down during the previous 2 years, were rebuilt to a more comfortable level of 2.2 million bales. Cotton prices declined sharply during 1982 because of reduced mill demand.

Poor weather and weak prices contributed to a decline in cotton production, to about 6.3 million bales, in 1982/83. However, with mill demand and prices remaining weak during early 1983, Indian cotton has become increasingly competitive in world markets. In order to strengthen domestic prices and partially recover lost textile export earnings, the Government raised export quotas. Cotton exports during 1982/83 are expected to rebound to 550,000 bales, primarily to South Korea, Taiwan, Hong Kong, the Soviet Union, and Western Europe. The export sales and recent increases in excise duties on manmade fibers began to boost cotton prices in

mid-1983 and to improve the outlook for cotton production in 1983/84.

Wheat Sales Buoy U.S. Farm Exports to India

Since the sharp decline in U.S. soybean oil sales to India 2 years ago, U.S. farm exports to India have been buoyed primarily by large commercial wheat purchases. India bought 1.5 million tons of U.S. wheat in 1981, its first substantial purchase since 1977, and an additional 4.0 million tons in 1982. Total U.S. farm exports are projected at a record \$773 million in U.S. fiscal year 1983, compared with \$309.9 million a year earlier. Soybean oil exports to India continued to sag in fiscal 1982 and totaled only 68,405 tons, the lowest since 1976, because of continued stiff competition from Brazilian soybean oil and Malaysian palm oil. India is expected to import about 100,000 tons of U.S. soybean oil during U.S. fiscal year 1983 because of larger shipments through P.L.-480, Title II programs and some increase in commercial sales.

An Average Monsoon Should Lead to Strong Growth in 1983/84

The performance of the Indian economy continues to be a "monsoon gamble." The strong recovery following the severe 1979/80 drought, however, demonstrated the considerable resilience of the economy. Although early performance is not always a good indicator, the 1983 monsoon provided generally favorable rainfall over most of India as of mid-July. With an average monsoon, the recent improvements in infrastructural services and industrial capacities, coupled with the outlook for stable domestic petroleum prices, should lead to a year of above-trend economic growth in 1983/84.

Assuming average rainfall, food grain production is projected at a record 137.5 million tons in 1983/84, including 53 million tons of rice and 42.5 million tons of wheat. The drought-induced shortages of cereals and the effects of continued strong cereal prices on public distri-

bution requirements may lead to an additional 1-2 million tons of wheat imports in 1983/84, particularly if the Government elects to continue building cereal stocks towards targeted levels. However, the recent upturn in real cereal prices, coupled with stable prices for energy-based inputs and new additions to irrigation capacity, could lead to stronger future gains in food grain production.

Despite the drop in oilseed production in 1982/83, the huge 1981/82 crop indicated India's potential for expanding production and reducing vegetable oil imports. Oilseed production remains sensitive to the distribution of monsoon rainfall, particularly in peanut-producing areas, although the recent expansion of rabi peanut and rapeseed production may eventually reduce the variability of the oilseed harvest. Without new oilseed varieties that have greater yield potential and drought resistance, additional short-term gains in output will likely require keeping producer prices relatively high, partly by restricting vegetable oil imports. With average weather, 1983/84 oilseed production is projected to rise about 7 percent to 14.6 million tons, with edible oil production of about 3.3 million tons and 1984 imports of about 1.2 million. With these projections, smaller requirements for imported oils for the vanaspati industry may again reduce the soybean oil share of total imports in 1984, although this would depend on the continued competitiveness of palm oil prices.

The reduction of trade deficits through import substitution and export expansion will remain a major focus of Indian economic policy during 1983/84. The success of these efforts will be critical to the continuation of the more liberal policies toward raw material and capital goods imports that have contributed to several years of relatively strong growth since they were initiated in 1978. Success in reducing the current account deficit, and in maintaining favorable access to world capital markets, will also be important in sustaining an adequate rate of investment in agricultural and other development programs. [Rip Landes (202) 447-8676]

NEPAL

Economy Slumps as Farm Production Declines

Nepal's economy is dominated by its farm sector, which employs more than 75 percent of the labor force, contributes over 60 percent of GDP, and accounts for most export earnings. Economic growth is largely dependent on adequate and well distributed monsoon rainfall. In Nepal fiscal year 1983 (July 16, 1982/July 15, 1983), real GDP declined by about 7 percent, as a combination of severe drought and flooding led to an estimated 11-percent drop in farm output. Growth in Nepal's small organized industrial sector, consisting primarily of jute processing, sugar refining, and rice and wheat milling, slowed to about 3 percent because of poor weather and weakened domestic demand.

Exports dropped 8 percent to about \$124 million in fiscal 1982 because of smaller receipts from jute products, timber, spices, and handicrafts. It is expected that further declines in these items, stemming from reduced purchases by India, plus a sharp decrease in rice exports, will cause export earnings to fall again in fiscal 1983. Imports, which consist primarily of industrial equipment,

manufactures, and fuels, grew by only 2 percent in fiscal 1982, after sharp increases of 22 and 25 percent in the previous 2 years. Imports slowed because of difficulties in moving goods through the port of Calcutta, restrictions on imports of luxury goods, and lower petroleum costs. Unusual rice imports are expected to lead to about an 8-percent increase in the fiscal 1983 import bill. Nepal's trade deficit, which has grown steadily in recent years, is financed by tourism receipts, remittances, and foreign grants, with aid disbursements becoming more important in recent years. Foreign reserves remain relatively comfortable at about 7 months of imports.

Farm Production Hit By Drought and Flooding

Severe drought in the Terai (plains) and hill regions at planting time and heavy rains and flooding in the Terai during harvest caused an 11-percent drop in food grain production in 1982/83. Production of rice, Nepal's major food staple and a leading export, fell 18 percent, and production of corn, grown largely under rainfed conditions in the hills, fell 20 percent. The wheat crop was not

Table 14.—Economic Indicators for Nepal

	FY75-FY80 Average	FY81	FY82 est.	FY83 est.
<i>Gross domestic product (Rs. billion)</i>				
Current prices	19.3	29.1	32.6	33.0
(% change)	(7.3)	(24.4)	(12.0)	(1.2)
1974/75 prices	17.9	18.2	19.0	17.7
(% change)	(2.3)	(3.3)	(4.4)	(-7.0)
Ag. sector share(%)	(60.1)	(62.6)	(62.4)	(61.0)
<i>Index of agricultural production (1976/77=100)</i>				
	100.0	103.0	109.0	97.0
(% change)	(-2)	(5.7)	(5.9)	(-11.0)
<i>Consumer price index (1972/73=100)</i>				
All items	151.9	201.4	222.3	245.0
(% change)	(5.3)	(13.4)	(10.4)	(10.0)
Food items	150.8	200.0	222.0	249.0
(% change)	(4.9)	(13.5)	(11.0)	(12.0)
<i>Population (millions)</i>				
	14.10	15.34	15.72	16.10
(% change)	(2.43)	(2.46)	(2.46)	(2.44)

Note: Data are for Nepal fiscal years. FY83 is year ending July 16, 1983.

Sources: Government of Nepal, World Bank, International Monetary Fund, ERS estimates.

Table 15.—Production of principal crops in Nepal¹

	1980/81	1981/82	1982/83 est.	1983/84 proj.
<i>1,000 tons</i>				
Rice	1,293	1,536	1,260	1,532
Corn	743	751	600	750
Wheat	477	509	600	625
Millet	125	122	125	130
Barley	23	22	23	23
Cereals	2,661	2,940	2,608	3,060
Jute	47	46	46	47
Oilseeds	77	62	70	70
Potatoes	275	300	280	305
Sugarcane	379	375	375	380

¹Production reported by Nepal crop years.

Sources: Government of Nepal, USDA and ERS estimates.

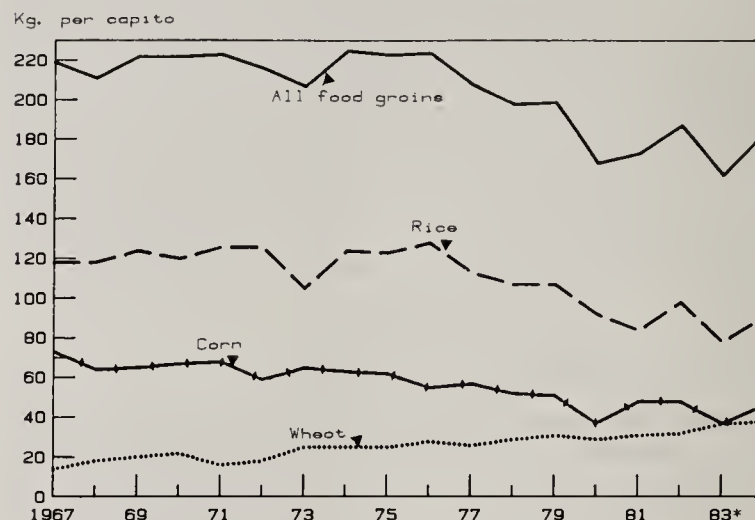
severely affected by the poor monsoon because it is mostly grown under irrigated conditions. Growth in the production of cash crops slowed to about 1 percent. Major cash crops include jute, sugarcane, oilseeds, and tobacco.

Per Capita Food Grain Production Declining

Slow growth in productivity and frequent poor weather have caused Nepal's per capita food grain production to decline in recent years. The decline in per capita rice production has eroded Nepal's traditional rice surplus, and exports have dropped steadily. The fall in per capita

corn output has been particularly sharp and has worsened the food deficit in the hill regions, where corn is grown and is an important part of the diet. Transportation difficulties make it both difficult and expensive to import food grain. Moving domestic or imported grain to food-deficit hill regions is particularly difficult because of the rough terrain and the limited purchasing power of the inhabitants.

Per Capita Production of Rice, Wheat, Corn and All Food Grains in Nepal



* Estimated.

Sources: Government of Nepal, ERS estimates.

Government efforts to increase rice and wheat production have focused on expanding irrigation and using improved seeds and inputs in the Terai region. Poor weather has prevented steady gains in production, and currently only about 25 percent of the rice area is sown to improved varieties. Fertilizer use is limited to about 20 percent of the rice area. Wheat production, however, has increased steadily because of irrigation protection and the profitability of available high-yielding varieties. The inability to provide assured water supplies in hill regions has hampered efforts to increase corn production through the subsidization of seed, fertilizer, and credit for hill farmers.

Recovery Depends on Monsoon

An average 1983 monsoon should lead to a recovery in agricultural production and in the overall economy in 1983/84. Without a rebound in food grain production, food supplies could become very tight and cause considerable hardship, particularly in the hill regions. Nepal's trade deficit is likely to continue to grow because of the diminishing rice surplus and the continued need for imports of raw materials, construction materials, and capital goods. Recent decisions to devalue the rupee by 9 percent and to limit imports of luxury and semiluxury goods aim at preventing the trade deficit from becoming unmanageable and jeopardizing the availability of external resources for development efforts. [Amjad Gill (202) 447-8229]

PAKISTAN

Industrial Sector Gains Boost Economy

Pakistan fiscal year 1982 (July 1981/June 1982) was the country's fifth straight year of rapid economic

growth. Real GDP increased by 5.1 percent, with the agricultural sector growing by 3.6 percent and industrial output by 12 percent. Sugar refining, fertilizer production from two new plants, and soft steel production led

the strong gains in the industrial sector. Construction also expanded because of improved cement supplies, while energy output rose because of increased production of hydroelectric power and natural gas. Slowed growth in the money supply and smaller increases in import prices helped reduce inflationary pressures. Both wholesale and consumer prices rose more slowly in fiscal 1982 than in the previous year.

New government policies have played an important role in the continued strong performance of Pakistan's economy. Current economic policy initiatives include the realigning of agricultural input and output prices to reduce subsidies; a shifting of development priorities toward the agricultural, energy, and social sectors; conservative fiscal management; and tight control of the money supply.

Table 16.—Economic Indicators for Pakistan

	FY75-FY80 Average	FY81	FY82 est.	FY83 est.
<i>Gross domestic product (Rs. billion)</i>				
Current prices	166.7	279.6	322.3	375.8
(% change)	(14.3)	(18.2)	(15.3)	(16.6)
1959/60 prices	47.9	59.5	62.6	67.5
(% change)	(5.5)	(6.6)	(5.1)	(7.9)
Ag. sector share(%)	(32.5)	(30.8)	(29.8)	(29.9)
<i>Index of agricultural production (1959/60=100)</i>				
	209.0	249.0	258.0	274.0
(% change)	(4.4)	(4.2)	(3.6)	(6.2)
<i>Wholesale price index (1969/70=100)</i>				
All items	262.3	358.8	393.6	425.1
(% change)	(8.0)	(13.3)	(9.7)	(8.0)
Food items	274.2	356.2	411.0	452.1
(% change)	(6.9)	(12.5)	(15.4)	(10.0)
<i>Consumer price index (1970=100)</i>				
All items	253.7	355.0	396.0	444.0
(% change)	(8.5)	(13.9)	(11.5)	(12.1)
Food items	261.1	354.5	404.0	457.0
(% change)	(7.8)	(13.8)	(14.0)	(13.1)
<i>Population (millions)</i>				
	76.41	84.60	87.13	89.73
(% change)	(2.99)	(2.99)	(2.99)	(2.99)

Note: Data are for Pakistan fiscal years. FY83 is year ending June 30, 1983.

Sources: Government of Pakistan, World Bank, International Monetary Fund, ERS estimates.

Pakistan's balance of payments position deteriorated during fiscal 1982 because of a 17-percent decline in export earnings and a slowdown in worker remittances. Depressed world economic conditions and commodity surpluses in other major producing countries led to a decline in rice and cotton exports. As a result, farm export earnings dropped nearly 39 percent to \$670 million. Exports of manufactures, which had expanded rapidly during 1977-81, declined because of the slowdown in world trade and, until early 1982, because of an overvalued exchange rate. Imports during 1982 totaled \$5.7 billion, up only 2.3 percent from the year before, following increases of 15 and 27 percent in the previous 2 years. Import growth slowed because of a decline in the imports financed by project aid, lower fertilizer imports, and the continued success of import substitution efforts, especially for wheat and sugar.

Poor Weather Slows Growth in Farm Sector

Agriculture remains the economy's mainstay, accounting for roughly a third of GDP, employing about 60 percent of the labor force and providing, directly or indirectly, nearly two-thirds of total export earnings. Despite extensive use of irrigation, agriculture remains somewhat vulnerable to poor weather. During 1982, growth in agricultural output slowed to 3 percent, short of the 5.1-percent target and down from the previous year's 4-percent increase. Although harvests of most crops reached record levels, growth in rice and wheat production was set back by poor weather.

Table 17.—Production of principal crops in Pakistan¹

	1980/81	1981/82	1982/83 est.	1983/84 proj.
	1,000 tons			
Wheat	11,470	11,500	12,000	12,200
Rice	3,123	3,430	3,369	3,500
Coarse grains	1,512	1,540	1,613	1,650
Cereals	16,105	16,470	16,983	17,350
Cottonseed	1,429	1,497	1,586	1,600
Rape & mustardseed	247	253	241	255
Oth. oilseeds	32	74	104	95
Oilseeds	1,708	1,824	1,931	1,950
Chickpeas		230	229	235
Cotton ²	3,300	3,494	3,750	3,900
Sugarcane	32,359	36,564	35,000	35,500

¹Production reported by Pakistan crop years. ²Cotton production in 1,000 480-lb bales.

Sources: Government of Pakistan, USDA and ERS estimates.

Production of wheat, the major food staple, is estimated at a record 12 million tons in 1983, as a result of remunerative support prices, timely winter rains, and increased fertilizer use. Heavy rains during harvest caused some losses and prevented the harvest of an even larger crop. Despite weather-related setbacks in 1982 and 1983, Pakistan's wheat production generally shows a strong upward trend. Government plans to become self-sufficient in wheat focus on increasing producer incentives, promoting greater use of fertilizer and other inputs through farmer education, and providing interest-free loans to producers. Pakistan's wheat imports in recent years have been used almost exclusively to help feed the large Afghan refugee population. Wheat imports totaled 470,000 tons in 1981/82 (July/June) and about 300,000 in 1982/83.

Rice Production and Exports Decline

To boost foreign exchange earnings, the Government continues to promote production of rice, particularly high-quality Basmati rice, by setting profitable procurement prices and encouraging farmers to use modern inputs. With the benefit of irrigation facilities, rice output increased steadily from 2.2 million tons in 1970/71 to 3.4 million by 1981/82. In 1982/83, however, rice output declined marginally because drought conditions limited irrigation supplies at the time of nursery transplanting during June-July and reduced area and yields. Because of stiff price competition, rice exports declined to about 794,000 tons during 1982, compared with 1.13 million in 1981. Exports are expected to rebound to about 1.2 million tons in 1983 because of a recovery in world demand

and increased promotion efforts. Major buyers of Pakistani rice include Cameroon, Saudi Arabia, the United Arab Emirates, and Iran.

Table 18.—Exports of rice by Pakistan, by major destination (calendar years)

	1979	1980	1981	1982
	1,000 tons			
North America	0	45	19	77
Cuba	0	20	19	76
South America	151	20	52	0
Brazil	118	0	0	0
Peru	33	20	20	0
Middle East	385	403	400	229
Iran	15	101	44	43
Iraq	80	26	76	0
Kuwait	17	0	33	26
Muscat & Oman	13	47	10	10
Saudi Arabia	67	94	111	82
Turkey	10	20	30	10
U.A.E.	119	61	79	36
Africa	551	387	511	322
Cameroon	242	230	167	255
Ivory Coast	52	0	253	2
Malagasy Rep.	42	83	—	0
Senegal	96	41	35	0
Asia	261	94	96	143
Bangladesh	98	0	0	102
Indonesia	60	0	39	11
Sri Lanka	100	92	44	29
Grand total	1,366	961	1,127	794

— = Less than 500 tons.

Sources: Rice Export Corporation of Pakistan, UN trade runs, FAS.

Cotton Crop a Record, But Exports Drop Sharply

Cotton, both in the form of raw cotton and textiles, is Pakistan's single largest source of export earnings. Cotton production achieved consecutive records in 1981/82 and 1982/83. Good weather, attractive support prices, minimal pest infestation, and concerted efforts by both government and private sectors to help farmers use improved cultural practices contributed to the record crops.

Pakistan's raw cotton exports fell 32 percent in volume and 49 percent in value in 1981/82 (July/June) because of record world production and a slump in demand by the world textile industry. Exports in 1981/82 totaled 1.1 million bales, down from 1.5 million the previous year. Exports are expected to fall marginally to about 1 million bales in 1982/83. China was the largest buyer in 1981/82, followed by Japan and Bangladesh.

Production of Oilseeds and Oil Continues To Trail Demand

Production of oilseeds and oils hinges largely on the size of the cotton harvest and, despite steady gains in cotton production, output of vegetable oils has generally lagged dramatically behind the 6- to 7-percent annual increases in domestic demand. Total oilseed output increased 6 percent in 1981/82 (November/October). Cottonseed production rose 5 percent, and rapeseed and mustardseed output, spurred by ideal weather and strong prices, increased 14 percent. The Government is placing

great emphasis on the production of new oilseed crops, including sunflower, soybeans, and safflower. However, the cultivation of these new crops remains experimental, and it will likely require a long period of development before they play important role in meeting domestic demand for edible oils.

Output of edible oil during 1982/83 is estimated at about 259,000 tons, about 7 percent higher than the previous year. Vegetable oil imports, which increased sharply to 561,000 tons in 1981/82, are expected to remain virtually unchanged at about 560,000 tons, and continue to include a substantial share of U.S. soybean oil in 1982/83. About 55 percent of Pakistan's 1981/82 edible oil imports were U.S. soybean oil, while the remainder was Malaysian and Indonesian palm oil. Edible oils accounted for about half of Pakistan's total agricultural imports in 1981/82.

Record Production Of Sugarcane and Sugar

The sugarcane harvest increased 13 percent to a record 36.6 million tons in 1981/82 (October/September). New pricing policies enhanced the profitability of cane production, caused a larger share of the cane crop to be crushed by mills, and led to a 54-percent increase in sugar output. While sugar output is expected to decline marginally in 1982/83, recent gains in production will continue to support increases in both consumption and stocks. Pakistan has ceased to be an importer of sugar and is planning to initiate small sugar exports this year or next.

U.S. Expands Exports of Wheat and Soybean Oil

U.S. agricultural exports to Pakistan jumped 48 percent to \$218 million in U.S. fiscal 1982, and they are forecast to rise to over \$290 million this year. Edible oil, wheat, and tallow are the major U.S. commodities exported to Pakistan, mostly under P.L.-480 and Commodity Credit Corporation (CCC) loans. Soybean oil exports more than doubled to 259,898 tons in U.S. fiscal 1982 and are forecast at 320,000 for U.S. fiscal 1983. Exports of wheat and products totaled 234,058 tons in fiscal 1982 and are forecast at 300,000 this year. Most of the wheat is provided under P.L.-480, Title II to feed the Afghan refugees. Exports of inedible tallow are expected to fall off in U.S. fiscal 1983, after jumping to a record 103,267 tons the previous year.

Pricing Policies Spur Farm Production

To boost agricultural yields and income, the Government continues its policy of improving producer incentives through a combination of output price adjustments and improved services at the farm level. The Government has tried to bring crop prices more closely in line with international prices. Procurement prices have been increased steadily to keep pace with inflation and input costs. Annual increases in wheat procurement prices averaged over 15 percent during over the last 3 years. Procurement prices for coarse and Basmati rice were raised an average of 15 percent and 9 percent, respectively, during the same period. To encourage oilseed production and reduce dependence on vegetable oil imports, the Government is also placing great reliance on price mechanisms. Attractive procurement prices have been established for new oilseed crops, including soybeans and sunflowers.

Strong Growth Expected in Fiscal 1983

In fiscal 1983, the Pakistan economy is expected to equal or better its year-earlier performance. According to government targets, real GDP is to grow by 7.9 percent, with rapid expansion expected in the agricultural and manufacturing sectors. Encouraged by better procurement prices and improved government services, agriculture is projected to expand by 6.2 percent. Growth is to be complemented by greater diversification into minor crops, livestock, and fisheries. Industrial output is targeted to grow by 9 percent, based on assumptions for a modest recovery in the textile sector and increased production of fertilizer, cement, and steel.

With the harvest of a record wheat crop in 1983, wheat imports are expected to be limited to about 400,000 tons during 1983/84 (July/June). Imported wheat will continue to be used primarily to feed the Afghan refugee population, which is expected to total 3.5 million by the end of 1983. Pakistan is also expected to expand its small wheat exports. In 1982/83 (July/June), about 50,000 tons of wheat were exported to Iran, and 1983/84 exports may reach 150,000 tons.

The 1983/84 rice crop is currently projected at 3.5 million tons, but the actual level will depend on rainfall and supplies of irrigation water for planting during July-

August. Rice exports are projected to grow to over 1 million tons in 1984, assuming a continued modest recovery in world demand. Another record cotton crop and some recovery in world demand are also expected to boost cotton exports in 1983/84. The lack of a breakthrough in oilseed production is likely to cause continued growth in edible oil imports. Vegetable oil imports are projected at 600,000 tons in 1983/84 (November/October). About 350,000 tons may be U.S. soybean oil provided under P.L.-480 or CCC loans.

A moderate improvement in Pakistan's balance of payments is projected by the Government in fiscal 1983. Some recovery in the world demand for Pakistan's exports and a recent exchange rate devaluation are expected to restrain growth in the trade deficit. The Government projects that the value of exports and imports will grow 12.5 percent and 5.5 percent, respectively. The recovery of exports is expected to be broad based, with both prices and volumes of cotton and rice exports increasing and the volume of manufactured exports growing by 14 percent. The volume of imports is likely to be held down by the exchange rate devaluation and the continued success of import substitution efforts, especially in cement, wheat, and sugar. [Amjad Gill (202) 447-8229]

SRI LANKA

Drought Slows Growth in 1982

Sri Lanka's economy, which depends mostly on the agricultural sector, was adversely affected by a severe drought during early 1982. Growth in real GDP fell to an estimated 4.3 percent in Sri Lanka fiscal year 1982 (January-December), primarily because of a drop in farm output. Inflation slowed marginally because of lower

prices for imported rice, wheat, sugar, and petroleum; smaller budgetary deficits; and more restrictive government monetary policy.

The trade deficit, which was reduced through restrictive import policies in fiscal 1981, increased to a record of more than \$1.1 billion in fiscal 1982. Exports grew by less than 2 percent because of a drought-induced decline in tree crop production and the impact of quota restrictions on garment and textile exports in major markets. Imports grew by nearly 16 percent because of larger rice and wheat requirements, and increased imports of petroleum and capital equipment for the Mahaweli Development project. External debt repayment obligations continued to rise sharply in fiscal 1982 as the Government, despite slow growth in exports, tried to maintain the flow of imports necessary for economic growth. Foreign exchange reserves fell to about \$300 million, equivalent to less than 2 months' imports.

Food Production Declines

Because of severe and prolonged drought, Sri Lanka's total agricultural production declined about 7 percent in 1982, following a 6.7-percent increase in 1981. Production of rice, Sri Lanka's primary food staple, dropped about 2 percent. The main crop, Maha, dropped marginally as the severe drought limited supplies of irrigation water. Yala, the second and smaller rice crop, was more seriously affected by dry weather. Production of other food crops, including cassava, corn, red onions, and pulses, declined about 4 percent.

Because of declines in food production, Sri Lanka's imports of food grains increased from 692,000 tons in 1980/81 (July/June) to 768,000 in 1981/82, and they are estimated at 800,000 tons in 1982/83. Wheat imports rose from 503,000 tons in 1980/81 to about 600,000 in each of the following 2 years, with the United States pro-

Table 19.—Economic indicators for Sri Lanka

	FY75-FY80 Average	FY81	FY82 est.	FY83 est.
<i>Gross domestic product (Rs. billion)</i>				
Current prices	40.2	78.51	93.3	115.0
(% change)	(18.0)	(26.1)	(18.8)	(23.2)
1970 prices	17.0	20.7	21.60	22.9
(% change)	(5.6)	(5.8)	(4.3)	(6.0)
Ag. sector share(%)	(28.8)	(28.7)	(28.5)	(28.5)
<i>Index of agricultural production (1968=100)</i>				
	123.0	144.0	134.0	145.0
(% change)	(4.6)	(6.7)	(-6.9)	(8.2)
<i>Consumer price index (1970=100)</i>				
All items	174.0	271.7	315.2	362.5
(% change)	(11.4)	(18.0)	(16.0)	(15.0)
Food items	182.4	292.5	322.5	361.0
(% change)	(13.0)	(17.6)	(10.3)	(12.0)
<i>Population (millions)</i>				
	14.26	15.17	15.46	15.76
(% change)	(1.76)	(1.91)	(1.90)	(1.91)

Note: Data are for Sri Lanka fiscal years. FY83 is year ending December 31, 1983.

Sources: Government of Sri Lanka, World Bank, International Monetary Fund, ERS estimates.

Table 20.—Production of principal crops in Sri Lanka¹

	1980/81	1981/82	1982/83 est.	1983/84 proj.
	1,000 tons			
Rice	1,451	1,469	1,435	1,700
Cassava	318	450	450	460
Corn	28	28	28	28
Coconuts	93	138	135	140
Tea	191	210	190	210
Rubber	156	165	160	170

¹Production reported by Sri Lanka crop years.

Sources: Government of Sri Lanka, USDA and ERS estimates.

viding about half through P.L. 480 and CCC loans in each year. Other exporters providing wheat on concessional as well as commercial terms include France, Australia, the European Community, and Canada. Rice imports rose to about 200,000 tons in 1982/83, with China filling a large share with Burmese rice through a rice-for-rubber barter agreement. Pakistan also supplied rice in exchange for tea. With larger imports, total food grain consumption rose about 2 percent, but stocks remained relatively low at about 180,000 tons.

Cash Crop Production and Exports Hit by Drought

Production of tea, Sri Lanka's major export, fell about 10 percent in 1982. Sri Lanka was unable to take advantage of stronger world tea prices, and tea export earnings fell slightly to about \$302 million in 1982. Output of rubber, the second largest export, fell about 3 percent in 1982, and rubber export earnings dropped more than 6 percent, largely because of lower world prices. Production of coconut products declined marginally, but stronger world prices and a relaxation of export duties resulted in a 27-percent increase in export earnings.

Wheat Sales Boost U.S. Farm Exports

Larger shipments of wheat boosted U.S. farm exports to Sri Lanka to \$51.7 million in U.S. fiscal year 1982.

Continued growth in wheat shipments, which account for 90 percent of total U.S. farm exports to Sri Lanka, are expected to push exports up 21 percent to nearly \$63 million in fiscal 1983. Wheat sales are forecast at 350,000 tons, up from 304,983 in fiscal 1982 and 268,268 the previous year.

Stronger Growth Expected in 1983

With more normal weather, the Sri Lankan economy is expected to grow by about 6 percent in fiscal 1983, resuming a pattern that followed the implementation of economic reforms during the late 1970's. The Government will probably continue to have difficulty controlling budgetary deficits, maintaining an adequate rate of development investment, and financing a burdensome current account deficit. Major development programs will likely move ahead, particularly with nationwide elections approaching. However, rising debt service obligations and slow growth in the availability of concessional assistance will make it difficult to mobilize sufficient domestic and external capital to meet all investment targets.

Assuming more normal weather, the performance of the agricultural sector is certain to improve substantially over 1982. The weather was quite favorable for the 1983 Maha rice crop and, if good weather continues, the Government expects the total rice harvest to increase 15-20 percent. Tea, rubber, and coconut production are also expected to improve. A recovery in rice production should allow a reduction in food grain imports in 1983/84 and an increase in the availability of scarce foreign exchange for vital imports of crude petroleum, fertilizer, and capital goods. Export earnings are expected to increase moderately in 1983, with most growth occurring in petroleum products garments, and gems. Export earnings from tea, rubber, and coconut products are, however, expected to show little growth because of weak world prices and strong competition. [Amjad Gill (202) 447-8229]

BALANCE OF PAYMENTS PROBLEMS INFLUENCE AGRICULTURAL TRADE AND DEVELOPMENT IN SOUTH ASIA

All of the major South Asian economies, including Bangladesh, India, Pakistan, and Sri Lanka, are experiencing tight balance of payments positions that likely will affect agricultural trade and development in the region through the mid-1980's. The problems are characterized by large current account deficits that are becoming increasingly difficult to finance with aid flows, which are declining in real terms, or increased commercial borrowing. Although imports of needed food staples must be afforded priority, the capacity to make commercial imports of agricultural commodities without interrupting imports of vital raw materials and capital goods has generally declined.

Short-term adjustments to these problems include an increase in debt obligations to the IMF and commercial lenders and, with the exception of India, more restrictions on imports of nonfood and nonessential food items. In the short run, there is greater need for nonproject

assistance, including food aid, that can be disbursed quickly to reduce the size of trade and current account deficits. Longer term adjustments involve giving higher priority to import substitution and export expansion, which will affect the region's farm sectors. However, the need to finance larger current account deficits has constrained the availability of foreign exchange for investment in agricultural and other development efforts.

The principal cause of the current balance of payments difficulties is the deterioration of the region's terms of trade. The jump in petroleum prices in 1979 led to a sharp increase in both the total import bill and petroleum's share of total imports in each country. At the same time, weak world demand contributed to declining volumes and unit values for many of the region's exports. In particular, weak prices for rice, cotton, sugar, tea, coffee, jute, and coconut products have been a major factor in deterioration of the terms of trade since

1979. Because farm products account for one-third of the region's exports, the promotion of farm exports has been a prominent element of efforts to reduce trade deficits in the region. While substitution for imported petroleum is of major importance, the continued expansion of agricultural production, particularly of food grains and edible oils, is also a key target of import substitution programs.

Table A.—Commodity terms of trade indices for South Asian countries

	FY78	FY79	FY80	FY81	FY82 est.	FY83 est.
Bangladesh (FY73=100)	75	77	85	67	56	67
India (FY69=100)	95	90	66	63	62	64
Pakistan (FY76=100)	105	126	111	97	89	92
Sri Lanka (FY77=100)	91	92	79	67	63	65

Note: Fiscal years defined in country tables.

Sources: World Bank, International Monetary Fund, ERS estimates.

Bangladesh: Imports Restricted By Limited Concessional Financing

Bangladesh has the most severe balance of payments problem in the region. Large trade deficits, which are typically more than twice the level of export earnings, persist because of a limited economic base that provides little scope for industrial export expansion or import substitution. Export earnings come primarily from jute and jute products. Imports of petroleum and capital goods are essential to economic expansion, and food imports are necessary to stabilize consumer prices. A major portion of the nation's import bill must be financed on concessional terms, with the actual level of imports largely determined by the availability of commodity assistance. The lack of real growth in aid flows in recent years has forced import restrictions and short-term borrowing that jeopardize future growth prospects.

Bangladesh has had external payments problems since its independence in 1971. These problems have become more acute since 1980, when a drought-induced increase in food imports and rising petroleum prices caused trade and current account deficits to climb sharply. The deficits were financed in fiscal 1980 and fiscal 1981 by a combination of larger aid disbursements, IMF assistance, short-term commercial borrowing, and drawdowns of foreign reserves, as well as a beneficial increase in worker remittances. In fiscal 1982, imports were restricted, and the taka was devalued 23 percent, but aid disbursements declined in real terms, and further commercial borrowing and drawing on foreign reserves were necessary to finance the current account deficit. Also, in fiscal 1982, the IMF terminated an Extended Fund Facility with Bangladesh when the Government was unable to comply with credit and exchange rate adjustments required by the IMF.

In fiscal 1983, Bangladesh's balance of payments improved somewhat because of declining petroleum prices, additional aid commitments, and an increase in worker remittances (included in "Other Current Account [Net]"). However, rising debt repayment obligations absorbed most of these additional resources, and imports were restricted to below the fiscal 1982 level. Additionally, an increase in food grain import requirements due to drought forced a reduction in petroleum and other nonfood imports vital to development. Since fiscal 1979, the severe pressure on available external financial resources has made it necessary to curtail development expenditures and confine investments to a small number of priority projects.

Bangladesh's balance of payments situation is not expected to improve significantly in the next several years. Increased exports, remittances, and aid commitments may be largely offset by debt service obligations, and only a small increase in imports will be supported.

Table B.—Balance of payments summary for Bangladesh

	FY78	FY79	FY80	FY81	FY82 est.	FY83 est.	FY84 proj.
<i>Million dollars</i>							
Exports(f.o.b.)	490	610	722	711	627	655	750
Agric. products	173	227	220	207	210	244	265
(%)	35	37	30	29	33	37	35
Imports(c.i.f.)	1,349	1,556	2,372	2,533	2,587	2,340	2,625
Agric. products	409	358	849	540	527	692	550
(%)	30	23	36	21	20	30	21
Concessional	178	179	375	194	230	275	220
(%)	44	50	44	36	44	40	40
Petroleum	174	179	383	503	561	445	550
(%)	13	12	16	20	22	19	21
Trade balance	-859	-946	-1,650	-1,822	-1,960	-1,685	-1,875
Oth. current account (net)	81	115	214	394	342	525	560
Current account balance	-778	-831	-1,436	-1,428	-1,618	-1,160	-1,315
Concessional aid							
Disbursements	829	1,030	1,222	1,147	1,236	1,350	1,440
Repayments	-37	-57	-50	-50	-41	-90	-112
Other capital (net)	26	30	178	197	266	-144	-1
IMF credit (net)	-27	-43	21	155	49	72	-12
Errors & omissions (net)	-38	-5	-54	-45	-20	0	0
Foreign reserve level	269	393	274	250	122	150	150
Memo items:							
Months of imports covered by reserves	2.39	3.03	1.39	1.18	.57	.77	.69
Debt service	69	95	94	92	88	159	195

Note: Data are for Bangladesh fiscal years. FY78 is year ending June 30, 1978.

Sources: World Bank, International Monetary Fund, ERS estimates.

However, Bangladesh will benefit from resumed IMF assistance following the Government's recent completion of an exchange rate review. Increased food grain production and crop diversification to reduce food import needs, as well as population control and education, are receiving high priority. The success of these programs will heavily depend on the availability of domestic and external financial resources. Nonproject assistance, which can be disbursed quickly, including aid in the form of food commodities, is needed to help offset trade deficits and budgetary deficits resulting from subsidized food distribution.

India Struggles To Reduce Trade Deficit

Following a period of current account surpluses and reserve accumulation, India's balance of payments position deteriorated badly in the early 1980's because of slowed export growth and a sharp increase in the cost of imports, particularly crude and refined petroleum. The resulting large trade and current account deficits necessitated increased commercial and concessional borrowing, and a drawdown of foreign reserves. India's large and diversified economic base provides more scope for implementation of planned import substitution and export expansion programs than in the other South Asian economies. Making these adjustments will, however, require the continued liberalization of imports that are essential to industrial and export expansion. A \$5.8 billion Extended Fund Facility negotiated with the IMF in 1981 is intended to provide balance of payments support during the planned 3-year adjustment period.

India's balance of payments position deteriorated abruptly in 1981, when world oil prices rose, domestic oil production fell, and import liberalization policies led to

larger imports of industrial inputs and capital goods. The huge fiscal 1981 trade deficit was financed by aid disbursements and borrowing from the IMF and commercial lenders. The trade deficit was reduced in fiscal 1982 as the economy recovered strongly from the 1979/80 drought and domestic output replaced imports of key commodities, particularly petroleum. However, the current account deficit increased as worker remittances fell. Despite increased commercial borrowing and drawings from the IMF, foreign exchange reserves fell dramatically. In fiscal 1983, improved export performance and continued gains in domestic petroleum production led to a decline in both the trade and current account deficits. A combination of commercial and concessional borrowing and IMF drawings helped improve foreign exchange holdings by the end of fiscal 1983. The balance of payments situation will remain tight in fiscal 1984, although trade and current account deficits are projected to decline. Beyond fiscal 1984, rising debt service obligations stemming from recent commercial and IMF borrowing, as well as hardening terms on concessional loans, will require the continued success of export expansion and import substitution programs.

The focal point of India's adjustment program is boosting domestic petroleum production through an infusion of domestic and foreign capital in oil exploration. The farm sector will also be an important target of import substitution and export expansion efforts. Increased food grain production will remain a priority, as will the more recent program to expand oilseed production and reduce imports of edible oils, currently the nation's third largest import item. In the short term, it is not expected that balance of payments pressures will lead the Government to forego imports of essential food items, primarily wheat and edible oils, which may be needed to ensure an ade-

Table C.—Balance of payments summary for India

	FY78	FY79	FY80	FY81	FY82 est.	FY83 est.	FY84 proj.
<i>Million dollars</i>							
Exports (f.o.b.) ¹	6,315	6,978	7,948	8,504	8,512	8,800	10,000
Agric. products	2,178	2,067	2,409	2,611	2,700	2,800	2,950
(%)	34	30	30	31	32	32	30
Imports (f.o.b.) ²	7,188	8,519	11,383	16,119	15,252	14,800	15,600
Agric. products	1,415	1,133	1,150	1,350	1,450	1,400	1,450
(%)	20	13	10	8	10	9	9
Concessional	184	183	227	222	239	150	170
(%)	13	16	20	16	16	11	12
Petroleum	1,811	2,043	4,046	6,657	5,570	4,853	3,840
(%)	25	24	36	41	37	33	25
Trade balance	-873	-1,541	-3,435	-7,615	-6,740	-6,000	-5,600
Oth. current account (net)	1,680	1,903	3,181	4,736	2,909	2,660	2,600
Current account balance	807	362	-254	-2,879	-3,831	-3,340	-3,000
Concessional aid							
Disbursements	1,628	1,695	1,685	2,100	1,927	2,130	2,035
Repayments	-645	-702	-491	-533	-509	-462	-545
Commercial borrowing							
Disbursements	(3)	(3)	281	288	798	644	410
Repayments	(3)	(3)	-202	-200	-176	-180	-200
IMF credit (net)	-330	-158	0	1,035	690	1,980	1,900
Errors & omissions (net)	616	337	-797	-162	-1331	-268	0
Foreign reserve level	5,823	7,357	7,579	7,228	4,796	5,300	5,900
Memo Items:							
Months of imports covered by reserves	9.72	10.36	7.99	5.38	3.77	4.30	4.54
MLT debt service	939	1,040	1,066	1,078	1,018	914	950

Note: Data are for Indian fiscal years. FY78 is year ending March 30, 1978.

¹Excludes exports of petroleum during FY82-FY84. ²Net of petroleum exports during FY82-FY84. ³Included in concessional aid.

Sources: World Bank, International Monetary Fund, ERS estimates.

quate level of consumption and food security stocks. Stable food prices are a key target of public policy, and food imports, at least at any foreseeable level, are a small portion of the total import bill. Farm commodity export promotion will focus on tea, coffee, spices, oil meals, cotton, and sugar.

Success in reducing trade deficits to levels that can be more easily financed will be critical if India is to maintain its access to favorable credit terms in international capital markets. While foreign capital has historically played a small role in the Indian economy because of a very high domestic savings rate (about 22 percent of GDP), the limited scope for increasing domestic savings will likely require more foreign borrowing in the future.

Pakistan: Trade Deficits Jeopardize Continued Strong Growth

Over the last decade, the economy of Pakistan has expanded more rapidly than any other in South Asia. Increasing balance of payments pressures are, however, jeopardizing sustained growth by limiting the capacity to import necessary petroleum and capital goods, and to meet planned investments in development programs. The deterioration of Pakistan's terms of trade has led to import bills—primarily for petroleum, capital goods, fertilizer, and edible oils—that are more than double the value of exports. Export earnings are heavily dependent on rice and cotton and have declined substantially because of sluggish world demand and weak prices. Worker remittances from abroad, primarily from the Middle East, have played a key role in offsetting the trade imbalances, but in the short term, it has been necessary to increase debt obligations dramatically and to constrain import growth. International reserves remain precariously low given Pakistan's dependence on

a few key commodities for export earnings and on worker remittances, over which it has little control.

Pakistan's trade deficits increased sharply in Pakistan fiscal year 1979 and 1980, as growth in the imports required to fuel the economy's strong growth outstripped export earnings. The trade gaps were financed primarily by worker remittances and a sharp drawdown of foreign reserves. In fiscal 1980, larger inflows of long-term capital from aid donors and OPEC lenders, short-term borrowing, and drawings from an IMF Extended Fund Facility offset the trade deficit and allowed some rebuilding of reserves. Worker remittances and export receipts reduced the current account deficit in fiscal 1981, but capital inflows declined and further improvement in the level of foreign reserves was achieved through drawings from the IMF. The balance of payments position eroded badly in fiscal 1982 because of a 17-percent drop in exports and slowed growth in remittances, and imports were constrained. Aid inflows rose, but debt rescheduling and additional short-term borrowing and IMF drawings were required to keep reserve holdings at an acceptable level.

Pakistan's balance of payments will likely remain very tight in fiscal 1983 and fiscal 1984, despite lower petroleum import costs and an expected recovery in exports resulting from a currency devaluation. Rising debt service obligations will complicate efforts to finance trade deficits and additional IMF drawings and short-term borrowing will probably be necessary.

The Government has little alternative to an increase in external debt obligations in the short term because of the effect of import restrictions on continued economic growth. Nonessential imports are being curbed, and expenditures on development projects and economic and social services are falling below targets as the Government attempts to reduce budgetary deficits and other pressures on scarce external resources. There is an

Table D.—Balance of payments summary for Pakistan

	FY78	FY79	FY80	FY81	FY82 est.	FY83 est.	FY84 proj.
<i>Million dollars</i>							
Exports (f.o.b.)	1,282	1,644	2,341	2,798	2,318	2,608	3,006
Major ag. products	354	408	758	1,091	670	775	900
(%)	28	25	32	39	29	30	30
Imports (f.o.b.)	2,751	3,816	4,854	5,563	5,691	6,005	6,598
Ag. products	482	841	591	630	606	575	600
(%)	18	22	12	11	11	10	9
Concessional	94	51	21	66	89	95	95
(%)	20	6	4	10	15	17	16
Petroleum	497	530	1,079	1,535	1,710	1,700	1,800
(%)	18	14	22	28	30	28	27
Trade balance	-1,469	-2,172	-2,513	-2,765	-3,373	-3,397	-3,592
Other current account (net)	864	1,058	1,373	1,774	1,843	2,052	2,251
Current account balance	-605	-1,114	-1,140	-991	-1,530	-1,345	-1,341
Long-term capital							
Disbursements	759	870	1,142	1,097	1,222	1,535	1,587
Repayments	-167	-235	-305	-516	-492	-445	-483
Other capital (net)	322	120	556	386	262	65	217
IMF credit (net)	-7	-14	78	315	358	599	20
Errors & omissions (net)	28	71	31	0	-18	-65	0
Foreign reserve level	768	466	828	1,119	921	1,265	1,265
Memo items:							
Months of imports covered by reserves	3.35	1.47	2.05	2.41	1.94	2.53	2.30
MLT aid disbursements	856	888	1,054	956	1,102	1,410	1,487
MLT debt service	327	448	557	646	747	993	1,100

Note: Data are for Pakistan fiscal years. FY78 is year ending June 30, 1978.

Sources: World Bank, International Monetary Fund, ERS estimates.

increased need for quick-disbursing forms of external assistance, including commodity aid.

Long-term adjustment measures include conservation and import substitution for petroleum, and the expansion and diversification of farm production to reduce imports and increase farm export earnings. Efforts to expand production and exports of cotton and rice will receive priority, as will plans to produce exportable surpluses of wheat. Additionally, the recently formed Oilseed Development Board has the objective of reducing edible oil import requirements by boosting domestic oilseed production.

Sri Lanka: Rising Debt Obligations Threaten Economy

During 1977-81, the Sri Lankan economy broke out of its low investment, low-growth pattern of the early 1970's and achieved an annual average real growth rate of over 6 percent. The improved performance was largely due to economic reforms that increased the role of the private sector. However, since 1979, the severe deterioration of Sri Lanka's terms of trade has led to a precarious balance of payments situation that threatens the availability of imports and financial resources necessary for sustained growth. The cost of the nation's critical petroleum and capital goods imports has risen sharply, while export earnings, primarily from tea, rubber, and coconut products, have stagnated. Short-term adjustment measures have involved cutbacks in development investments, drawdowns of foreign reserves, IMF assistance, and commercial borrowing. Debt repayment obligations, which were previously of minor concern, are increasing dramatically and could eventually place a severe burden on the economy.

Sri Lanka's balance of payments problems became acute in fiscal 1980 when the import bill, largely for petroleum and capital goods, grew by more than 40 percent for the second straight year while export growth averaged 12 percent. The current account deficit doubled, requiring inflows of short-term capital and a draw-down of reserves. In fiscal 1981, adjustments included restrictions on capital expenditures, credit, and imports of capital goods and nonessential foods. The current account deficit and short-term borrowing were reduced, and drawings from an IMF Extended Fund Facility led to an improved foreign reserve position. In fiscal 1982, the situation again deteriorated as export earnings languished because of drought and weak world demand. Also, import requirements for food and capital goods grew, and external debt rose sharply. The large current account deficit projected for fiscal 1983 is likely to produce a further increase in the debt burden.

In the short-term, the Government has increased borrowing in an effort to avoid restricting imports and jeopardizing growth prospects. However, current account deficits of the size incurred in recent years cannot be financed indefinitely and further adjustment will be necessary. Adjustments will focus on budgetary discipline to reduce Government credit needs, on control of inflation to limit pressure on imports, on careful management of investments, and on export expansion. While Sri Lanka's small economy provides a limited base for import substitution for capital goods and crude petroleum, efforts will continue to reduce food grain imports through increased rice production and reduced consumer subsidies. Export development will focus on traditional tree crops, including tea, rubber, and coconut products, as well as minor crops, such as coffee, spices, fruits, and nuts. Foreign borrowing will be necessary to support many of these programs, but much of the financing will

Table E.—Balance of payments summary for Sri Lanka

	FY77	FY78	FY79	FY80	FY81 est.	FY82 est.	FY83 proj.
<i>Million dollars</i>							
Exports (f.o.b.)	747	846	982	1,065	1,062	1,080	1,200
Major ag. products	553	603	610	576	538	520	550
(%)	74	71	62	54	51	48	46
Imports (c.i.f.)	716	999	1,450	2,051	1,904	2,200	2,350
Ag. products	273	272	326	422	352	475	450
(%)	38	27	22	21	18	22	19
Concessional	47	54	33	38	34	50	45
(%)	17	20	10	9	10	11	10
Petroleum	160	154	251	489	448	540	570
(%)	22	15	17	24	24	25	24
Trade balance	31	-153	-468	-986	-842	-1,120	-1,150
Other current account (net)	47	29	96	188	208	250	300
Current account balance	78	-124	-372	-798	-634	-870	-850
MLT capital							
Disbursements	214	296	418	506	634	900	800
Repayments	-83	-68	-62	-127	-94	-71	-75
Short term capital (net)	-29	-3	0	157	22	38	30
IMF credit (net)	47	20	67	-4	163	18	145
Errors & omissions (net)	-26	-14	69	-5	-10	-45	0
Foreign reserve level	293	400	520	249	330	300	350
Memo items:							
Months of imports covered by reserves	4.91	4.80	4.30	1.46	2.08	1.64	1.79
MLT aid disbursements	204	251	268	326	385	542	627
MLT debt service	108	122	113	122	116	257	245

Note: Data are for Sri Lanka fiscal years. FY78 is year ending December 31, 1978.

Sources: World Bank, International Monetary Fund, ERS estimates.

Table F.—Estimates of commercial agricultural import capacity for South Asian countries¹

	FY77	FY78	FY79	FY80	FY81	FY82	FY83	FY84
<i>Million dollars</i>								
Bangladesh	274	238	321	143	170	130	183	278
India	1,558	1,976	2,007	1,337	423	343	713	1,096
Pakistan	126	265	196	515	710	408	502	420
Sri Lanka	394	383	341	140	229	186	296	347

Note: Fiscal years defined in country tables.

¹Calculated using methodology described in: *Food Aid Needs and Availabilities*, USDA/ERS/IED, 1982.

have to be provided on concessional terms to avoid additional commercial debt obligations. There is a pressing short-term need for commodity assistance, including food aid.

Balance of Payments Pressures Constrain Food Import Capacity

Estimates of commercial food import capacity shown above document the extent to which balance of payments problems have made it more difficult to import food on commercial terms. These estimates measure the amount of foreign exchange that can be spent on commercial purchases of agricultural commodities without reducing the portion of available foreign exchange normally spent for other imports and for debt repayment. Actual purchases larger than the estimated capacity show a shift in favor of agricultural items, while actual purchases below the estimated capacity imply adjustment towards other imports.

The estimates show that the capacity to import farm commodities without interfering with other imports has generally declined for Bangladesh, India, and Sri Lanka since fiscal 1979. This reflects the tight balance of payments positions endured by these countries over the last several years. The upturn in import capacity estimated for Bangladesh, India, and Sri Lanka for fiscal 1983 and 1984 largely reflects projected improvements in export earnings. Pakistan's import capacity improved during fiscal 1980 and 1981, primarily because of strong export growth, but since then, export earnings have not risen, and import capacity has declined.

Agricultural products account for a relatively small share of the total import bill in India and Pakistan. These countries have greater ability to increase food imports above the estimated capacity when necessary without seriously disrupting other imports. Also, the importance of adequate food supplies and stable prices to public policy in the region will typically lend priority to food imports. While these factors suggest that there may be little interruption in food imports in the short term, the import capacity estimates document the rationale for the planned import substitution and export expansion programs in the region.

Slowed Growth in U.S. Farm Exports Expected

Balance of payments pressures will contribute to the variability of U.S. farm exports to South Asia over the

next several years. Exports to the region will probably continue to consist almost exclusively of essential food staples, primarily wheat and vegetable oils. The importance of adequate food supplies at stable prices, coupled with the region's susceptibility to production shortfalls due to bad weather, will continue to lead to increased imports of essential foods at the expense of other items when necessary. This behavior is reflected in the large increase in U.S. exports to South Asia in U.S. fiscal year 1983. In years of adequate supplies, however, scarce foreign exchange will be diverted to the purchase of needed industrial inputs.

The extreme difficulties faced by countries in the region in financing burdensome current account deficits suggest that additional commodity assistance, including food aid, would be beneficial. Mechanisms, perhaps including barter arrangements, which help ensure more balanced two-way trade could also boost U.S. farm exports to the region. In response to large trade deficits, exchange rates in the region have been devalued sharply against the U.S. dollar. These exchange rate movements have hindered the expansion of commercial U.S. exports to the region by making some U.S. products, particularly soybean oil, less competitive in local currency terms.

Table G.—South Asian currency exchange rates

	FY80	FY81	FY82	FY83 ¹
Bangladesh (Taka/\$)	15.48	16.34	20.04	23.39
India (Rs/\$)	8.01	8.02	9.17	9.60
Pakistan (Rs/\$)	9.90	9.90	10.55	12.60
Sri Lanka (Rs/\$)	16.53	19.25	20.83	22.18

Note: Fiscal years defined in country tables.

¹As of March 1983.

Source: International Monetary Fund.

In the long run, national programs to increase food production and reduce imports will probably constrain growth in U.S. farm exports to the region. While such programs have been in place for some time, they have acquired a new urgency, particularly in the oilseed sector, because of balance of payments pressures. Also, South Asian competition with U.S. farm exports, particularly of rice, oilmeals, and cotton, is likely to increase. A key to the success of these adjustment efforts will be the ability of South Asian countries to achieve investment targets with a combination of domestic and increasingly scarce foreign capital. [Rip Landes (202) 447-8676]

ROLE OF PUBLIC DISTRIBUTION SYSTEMS IN CEREAL TRADE IN SOUTH ASIA

Government involvement in domestic procurement, public distribution, stockholding, and imports of cereals are key elements of South Asian food policy. All governments in the region attempt to cope with the inherent instability of cereal production and prices by supporting producer prices, and ensuring stable supplies of subsidized cereals for consumers. Food security stocks are accumulated through domestic procurement and imports, and held to protect consumers against shortfalls in domestic production. Between 10 and 20 percent of annual cereal supplies are channeled through the region's public distribution systems (PDS's). Because most cereal imports are channeled through government agencies and marketed through PDS's, the balance between domestic procurement, distribution, and stockholding requirements is as important in assessing import requirements as aggregate supply and demand conditions.

Balancing adequate producer price incentives—and, hence, levels of procurement—with consumer price stability, while controlling budgetary costs of subsidies, is the principal challenge of food policy in the region. Policies have traditionally tilted towards consumer interests because weather and technology constraints can prevent immediate producer response to price incentives, and because of the critical need to assure stable cereal prices for low-income and vocal urban consumers. The result has been substantial requirements for imported cereals, primarily wheat, to meet distribution and stockholding needs. However, recent pricing adjustments in several countries have tended to boost producer incentives and reduce consumer subsidies, and the availability of foreign exchange to finance imports has tightened. These factors suggest that additional efforts are being made to reduce dependence on imported cereals.

Food Security Is The Objective

The primary objectives of South Asian cereal procurement, public distribution, and stock holding systems are to provide assured, remunerative markets for producers to support ongoing production enhancement efforts, and to assure stable supplies and prices for consumers. The basis for government intervention is the vulnerability of large segments of the population, particularly urban and low-income consumers, to sharp swings in cereal supplies and prices caused by periodic deficiencies in monsoon rainfall.

It is generally assumed by policymakers that government intervention is necessary to achieve the above objectives. Common government viewpoints are that private traders (1) take speculative advantage of the unstable production and price environment, (2) cannot use limited transport facilities as efficiently as the government, and (3) are not as effective as the government in stabilizing prices over space and time. Moreover, government control over imports and over stock accumulation and depletion is deemed necessary to regulate expenditures of scarce foreign exchange.

Government intervention in cereal markets in South Asia began after the 1943 Bengal famine. While variability in cereal production and consumption has declined somewhat during the late 1960's and 1970's compared with earlier periods, at least in part because of the suc-

**Table A.—Growth rates and variability of
production and consumption of cereals
in South Asia**

	Production		Consumption	
	Growth rate	Variability ¹	Growth rate	Variability ¹
	Percent			
Bangladesh				
1960-71	2.2	5.9	2.6	6.6
1971-82	3.2	4.9	2.8	3.3
India				
1960-71	3.0	9.1	2.4	4.7
1971-82	2.2	7.2	2.2	3.9
Pakistan				
1960-71	6.2	10.8	5.0	7.1
1971-82	4.4	3.7	2.9	3.3
Sri Lanka				
1960-71	5.7	14.4	4.9	11.5
1971-82	3.0	8.9	1.6	7.2

¹Standard error of the regression divided by the mean of production or consumption.

Source: Calculated from USDA and ERS data..

cess of the PDS's, output and price remain variable because of fluctuations in monsoon rainfall.

The characteristics of cereal demand and supply response in South Asia provide additional reasons for government intervention and also suggest the difficulties in managing the systems. The potential for sharp swings in prices is aggravated by the nature of demand for cereals in the region. Relatively high income elasticities and low price elasticities of demand for cereals can lead to abrupt upswings in prices during poor production years and abrupt downswings following bumper harvests. High income elasticities of demand also place constant pressure on government, as well as open-market, cereal supplies. These factors increase the exposure of producers and consumers to price risk. They also contribute to the unpredictability of procurement, distribution, and import and stock holding requirements.

The degree of response of cereal supplies to price signals in South Asia, particularly in the short term, is a matter of uncertainty because of the overwhelming and unpredictable role of weather. Also, several seasons of consistent price signals may be necessary to alter existing patterns of land and input use. Thus, output will not necessarily respond in the expected way to prices, and there must be a mechanism to cope with repetitive deficits and, in some instances, surpluses. The extent of supply response to higher prices is, of course, constrained by input supplies, technology, and tradition, as well as weather. The uncertainty of supply response partially explains the limited use of strong producer incentives, at least until recently, to try to balance procurement and distribution requirements.

Basic Features of PDS's

The basic features of current PDS's are similar across South Asia. The systems consist of (1) procurement of cereals to support producer prices, (2) some control of consumer prices through targeted and/or subsidized distribution, (3) administrative control of procurement, dis-

tribution, and most stock holding, including a system of balancing PDS requirements in deficit and surplus areas, (4) administrative control over imports and exports, and (5) support for increasing production by providing improved technology, inputs, and assured prices to farmers. Virtually all of these features are common to South Asian PDS's today.

Policies affecting procurement, distribution, stocks, and trade attempt to balance the conflicting interests of producers and consumers within the context of limited government resources. Government action to raise producer prices makes cereals less affordable unless subsidies are increased. An increase in cereal prices translates into a reduction in wages for urban dwellers, who are a growing and politically active part of the population.

Though the South Asian PDS's share similar features, further examination of how the systems work and the problems that are faced requires a look at each country's production and marketing environment. Commodity emphasis and policies on pricing, procurement, imports, and stockholding differ by country.

Bangladesh PDS Moves to Improve Producer Incentives

In Bangladesh, the PDS includes wheat and rice. Distribution of wheat and rice falls into three main categories: (1) political distribution aimed primarily at providing low-cost cereals to government employees, (2) economic distribution to the low-income urban population with the aim of manipulating prices, and (3) food relief distribution aimed at providing low-cost food to the very poor. Since 1975, distribution in the first two categories has increased at the expense of the third. An estimated 20 million people received cereals through the PDS in 1982.

Procurement, initiated in 1975, reached a high of 1 million tons in 1980/81 (July/June), nearly the same as

imports in that year (table B). Imports, primarily on concessional terms, have historically been much more important than domestic procurement. Per unit costs of concessional imports are far lower than those of domestically procured cereals. Therefore, the Government minimizes budgetary expenditures by obtaining the highest possible level of concessional imports, rather than by trying to raise procurement through substantial increases in the procurement price. Procurement is, however, important in balancing distribution requirements with uncertain levels of concessional and commercial imports.

Subsidies through the PDS annually account 10-15 percent of the Bangladesh budget. Subsidy expenditures averaged more than \$50 million from 1975 to 1982, reaching \$52.5 million in 1982. Hence, controlling such subsidies is an important policy objective. Raising the procurement price without also raising the issue price to consumers increases the Government's budgetary liability.

It is useful to evaluate changes in pricing policy by comparing trends in administered issue (retail) and procurement (support) prices, and in actual harvest prices for rice. Actual harvest prices are the best indicator of producer incentives, particularly since procurement is not yet effective in establishing a floor under harvest prices. Until the late 1970's, the issue price remained well below both the procurement price and the harvest price. Distribution of rice at such low prices, while of obvious benefit to consumers, had a depressing effect on harvest prices.

With the urging of donor countries, particularly the United States, the Bangladesh Government took policy initiatives to boost producer incentives during the late 1970's and early 1980's. Between 1975 and 1983, the issue price for rice was increased at an annual rate of 28 percent, more than three times the annual increase in the procurement price. The effect was to substantially dampen the rate of growth of subsidies and to somewhat

Table B.—Government wheat and rice operations in Bangladesh (July/June)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83 est.
1,000 tons								
Rice								
Procurement	349	311	548	305	143	864	290	189
Net imports	396	196	305	59	917	84	236	336
Public distribution	517	798	607	562	702	515	769	606
Ending stocks	463	138	350	102	322	696	338	286
Operating deficit ¹	-168	-487	-59	-257	-559	349	-479	-417
Stock adjustment ²	NA	-325	212	-248	220	374	-358	-52
Rice								
Procurement	7	3	11	56	126	180	13	75
Net imports	1,049	623	1,329	1,124	1,954	994	1,156	1,870
Public distribution	1,178	697	1,271	1,257	1,738	1,035	1,297	1,485
Ending stocks	337	235	245	107	469	543	244	391
Operating deficit ¹	-1,171	-694	-1,260	-1,201	-1,612	-855	-1,284	-1,410
Stock adjustment ²	NA	-102	10	-138	302	74	-299	147
Total								
Procurement	356	314	559	361	269	1,044	303	264
Net imports	1,445	819	1,634	1,183	2,871	1,078	1,392	2,206
Public distribution	1,695	1,495	1,878	1,819	2,440	1,550	2,066	2,091
Ending stocks	800	373	595	209	791	1,239	582	677
Operating deficit ¹	-1,339	-1,189	-1,319	-1,458	-2,171	-506	-1,763	1,827
Stock adjustment ²	NA	-427	222	-386	582	448	-657	95

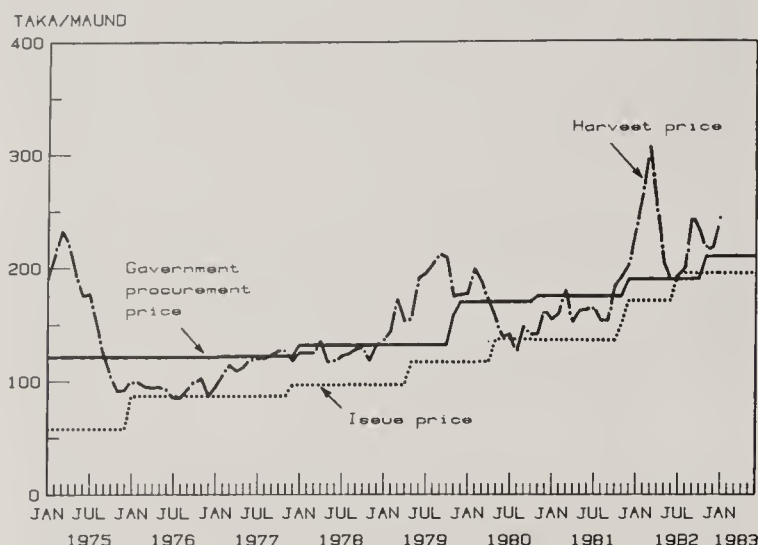
Note: Annual supply and distribution data do not balance because of reporting lags and storage losses.

NA = not available. ¹Procurement-public distribution. ²Ending stocks-beginning stocks.

Source: Bangladesh Monthly Statistical Bulletin.

reduce the depressing effect on harvest prices and producer incentives that resulted from distributing cereals at greatly subsidized levels.

Bangladesh Harvest, Procurement and Issue Price for Milled Rice, 1975-83



Source: Monthly Statistical Bulletin Bangladesh.

In the early 1980's, the Government boosted storage capacity to 1.8 million tons. Storage capacity is now more than 12 percent of production and more strategically located throughout the country. Storage levels may now be sufficient in years of normal imports and good production. But capacity in major surplus and deficit districts is not yet sufficient to handle wide variations in production.

Higher procurement prices to improve producer incentives are likely in the 1980's. At the same time, the Government will probably continue to increase issue prices in a way that will reduce per unit subsidies and control the total cost of subsidies. Construction of storage in major surplus and deficit areas will also continue to be a priority. Should Bangladesh maintain the 3-percent rate of growth in cereal production achieved in the 1970's, imports, primarily concessional, will still be necessary to maintain stocks and minimum consumption, particularly in poor monsoon years. Production trends and likely policy directions suggest that imports, which averaged 1.6 million tons between 1975 and 1982, will remain at roughly that level in the 1980's. If a higher production growth rate is achieved in response to improved producer incentives and technological advances, imports could drop to an average of 0.5 to 1.0 million tons annually.

Indian PDS Nearly Balances Procurement and Distribution

The 200 million people served by India's PDS constitute a population larger than all but a handful of nations in the world. Indian wheat import requirements for its PDS averaged 10-15 percent of world wheat imports in the 1960's and early 1970's. Though imports virtually ceased in the late 1970's, they bounced back in the early 1980's following sharp drought-induced declines in production in 1979/80 and 1982/83.

The major objective of India's PDS has been to assure stable consumer cereal prices. The system has been highly successful in achieving this goal, even facilitating

a real decline in cereal prices through most of the 1970's. Despite the emphasis on consumer price stability and the lack of real increases in producer price incentives, the system approached a balance between distribution requirements and procurement in the late 1970's. Imports declined, and there were net exports in some years (table C).

However, as demonstrated following the poor monsoons in 1979/80 and 1982/83, the system can still be thrown out of balance by sharp declines in cereal production, which reduce procurement and boost distribution requirements. It has proved difficult and expensive to maintain stocks at levels that can absorb the effects of major declines in production. The Government showed in 1981 and 1982 that, despite the political sensitivity of the food grain self-sufficiency issue and the higher cost of imported wheat, it would continue to import wheat when necessary to stabilize consumer prices and ensure adequate levels of food security stocks. At the same time, recent real increases in administered procurement and issue prices, which are a departure from historical policies, suggest more effort to hold the system in balance.

Assessment of future import prospects requires an analysis of trends in procurement, distribution, and stock targets. Although distribution and stock levels are considered in establishing procurement prices, the major determinant of procurement is the level of wheat and rice production in the surplus producing areas of northern India. Most of the recent gains in procurement of both rice and wheat are explained by steady increases in production in these heavily irrigated areas. Most of the variation in procurement results from fluctuations in output in more rainfall-dependent areas where marketed surpluses are smaller and more variable. Wheat procurement, which is conducted in the open market, is also dependent on how competitive the Government's procurement price is with open-market prices. High open-market prices have prevented increases in wheat procurement from matching production gains in some years. Rice procurement is conducted primarily through a levy on rice millers and is not significantly affected by price.

While potential remains for boosting wheat and rice production in current surplus producing areas, future gains in procurement will be more dependent on larger and more stable surpluses in areas that are now marginally surplus or deficit. The policy of keeping procurement prices stable or declining in real terms, which existed during the 1970's, may not have constrained production in the current surplus areas because of their comparative advantage in cereal production. During the last 2 years, however, prices have been increased in real terms, and these new price incentives may eventually be effective in boosting production and procurement in new areas.

Subsidized distribution is conducted through a network of fair price shops located primarily in urban areas. Some wheat is also distributed to modern flour mills to meet growing demand for breads, biscuits, and pastry items. The level of distribution depends on the allotments made available from the state and central government pools and the relationship between the government issue prices and open-market prices. Issue prices are always lower, but quality and convenience factors also influence consumer purchases.

The system has historically distributed mostly wheat, because there have been larger domestic surpluses of wheat, and because it is cheaper to meet food grain deficits with imports of wheat. There is, however, some flex-

Table C.—Government wheat and rice operations in India (July/June)

	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	est.
	1,000 tons									
Wheat										
Procurement	3,929	6,928	5,186	5,594	7,791	6,081	6,407	7,579	8,100	
Net imports	5,656	6,660	3,804	-136	-627	-348	—	2,253	3,850	
Public distribution	6,357	5,198	5,866	7,092	6,610	8,974	6,839	6,876	9,000	
Ending stocks	3,980	11,499	14,635	12,137	11,687	8,822	7,732	10,150	13,100	
Operating deficit ¹	-2,428	1,730	-680	-1,498	1,182	-2,893	-432	693	-900	
Stock adjustment ²	1,835	7,516	3,136	-2,498	-450	-2,865	-1,090	2,418	2,950	
Rice										
Procurement	3,564	6,296	4,625	4,848	6,355	3,771	5,659	7,186	6,700	
Net imports	163	199	11	-145	-240	-380	-870	-800	-275	
Public distribution	3,556	2,987	4,471	3,985	3,207	5,585	5,645	7,067	7,045	
Ending stocks	1,584	5,112	5,497	6,562	9,605	7,089	5,847	5,120	4,500	
Operating deficit ¹	8	3,309	154	863	3,148	-1,814	14	119	-345	
Stock adjustment ²	-42	3,528	385	1,065	3,043	-2,516	-1,242	-727	-620	
Total										
Procurement	7,493	13,224	9,811	10,442	14,146	9,852	12,066	14,755	14,800	
Net imports	5,819	6,859	3,815	-281	-867	-728	-870	1,453	3,575	
Public distribution	9,913	8,185	10,337	11,077	9,817	14,559	12,484	13,943	16,045	
Ending stocks	5,564	16,611	20,132	18,699	21,292	15,911	13,579	15,270	17,600	
Operating deficit ¹	-2,420	5,039	-526	-635	4,329	-4,707	-418	812	-1,245	
Stock adjustment ²	1,793	11,047	3,521	-1,433	2,593	-5,381	-2,332	1,691	2,330	

Note: Annual supply and distribution data do not balance because of reporting lags and storage losses.

¹Procurement-public distribution. ²Ending stocks-beginning stocks.

Sources: Government of India, FAS, ERS estimates.

ibility to adjust wheat and rice allocations according to the supply situation. Levels of wheat and rice distribution are variable—rising in poor production years when open market prices are high and falling in good years when open-market prices are low—and are difficult to predict. There is, however, an upward trend in total distribution, and current government policy is to continue to expand distribution through the PDS.

Issue prices for cereals are typically adjusted along with procurement prices, with the aim of controlling the budgetary cost of subsidies. Through most of the 1970's, adjustments in issue prices paralleled those in procurement prices, and served both to keep prices stable or declining in real terms and to prevent growth in per unit subsidies. However, in the last 2 years, procurement prices have been increased in real terms, with slightly larger increases in issue prices. These adjustments have contributed to higher real cereal prices, as well as smaller per unit subsidies.

The practice of holding substantial levels of cereal stocks became an integral component of India's food security system during the mid-1970's. Large stocks are viewed by policymakers as necessary to protect against inevitable production shortfalls in a timely manner, to assure effective leverage on domestic open-market prices, and to allow cereals to be imported at opportune times in terms of international prices and foreign exchange availability. The stated goal is to hold 21-24 million tons of stocks as of July 1. Holdings would consist of 12-15 million tons of buffer stocks and about 9 million tons of operational stocks to meet short-term distribution requirements.

July 1 stocks were near the target in 1977 and 1979, but they have not been rebuilt to this level since the 1979/80 drought. Recent import decisions provide an indication that 18-20 million tons are considered necessary, but it does not appear that priority is being given to achieving the 21-24-million-ton target. A lower stock

level may now be considered optimal because of persistent criticism concerning the costs of carrying large stocks as opposed to relying on trade, as well as the limited capacity of government-owned, covered storage.

Because of the continued vulnerability of production and procurement to poor monsoons, it is likely that India will remain somewhat dependent on cereal imports during the 1980's to meet growing distribution requirements and to maintain adequate stocks. It is expected that imports will only follow years of significant drought-induced declines in production. It is unlikely that imports will again approach the levels of the mid-1970's, unless poor production years occur in succession. The recent trends towards higher real administered prices and smaller unit subsidies suggest a continued commitment by the Government to balance procurement and distribution and to reduce imports. However, the short and long-term effects of these policies may vary. Import needs may rise in the short term if supply does not respond rapidly and demand for still-cheaper publicly distributed cereals rises. In the longer term, a continuation of these policies should reduce import needs as supply responds and the differential between issue prices and open-market prices is reduced.

Success in Wheat Production May Lead to Phase-Out of Pakistan's PDS

In Pakistan, wheat flour produced from both domestically procured and imported wheat is distributed to consumers in urban and wheat-deficit rural areas through a network of ration shops. Rice is procured only for export and is not included in the PDS because it is readily available on the open market and is not considered a major food staple. The administration of the PDS is the responsibility of provincial governments, while procurement and pricing policies are the responsibility of the Federal Government.

Table D.—Government wheat operations in Pakistan (April/March)

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83 est.
1,000 tons								
Wheat								
Procurement	1,217	2,339	1,842	1,086	2,376	2,955	3,989	3,136
Net imports	1,289	507	800	2,111	668	20	135	300
Public distribution	2,285	2,762	2,880	2,977	2,746	3,118	3,212	3,384
Ending stocks	416	686	173	272	772	1,018	1,571	1,623
Operating deficit ¹	-1,068	-423	-1,038	-1,891	-370	-163	777	136
Stock adjustment ²	NA	270	-513	99	500	246	553	51

Note: Annual supply and distribution data do not balance because of reporting lags and storage losses.

NA = not available.

¹Procurement-public distribution. ²Ending stocks-beginning stocks.

Sources: Government of Pakistan, FAS, ERS estimates.

Table E.—Government rice operations in Sri Lanka (calendar years)

	1975	1976	1977	1978	1979	1980	1981	1982 est.
1,000 tons								
Procurement	169	188	358	469	378	142	85	100
Net imports	434	425	542	161	211	189	168	186
Public distribution	629	634	722	671	447	318	159	200
Ending stocks	96	60	266	250	169	103	96	126
Operating deficit ¹	-460	-446	-364	-202	-69	-176	-74	-100
Stock adjustment ²	NA	-36	206	-16	-81	-66	-7	30

Note: Annual supply and distribution data do not balance because of reporting lags and storage losses.

NA = not available. ¹Procurement-public distribution. ²Ending stocks-beginning stocks.

Sources: Government of Sri Lanka, ERS estimates.

Rapid gains in wheat production and procurement during the late 1970's and early 1980's have led to a sharp reduction in import requirements to balance procurement and distribution (table D). Government stock levels have also improved substantially in recent years, and they now approach the Government's 2-million-ton target. A readjustment of government pricing policies has probably played a major role in boosting production and procurement, as well as slowing growth in public distribution. Since 1980, the procurement price has been increased more rapidly than in the past, and the issue price has been raised even more rapidly so that it now exceeds the procurement price.

The annual budget outlay for the PDS declined from an average of \$192 million during 1974/75-1978/79 to \$172 million in 1980/81. The decline in budgetary outlays for wheat subsidies has stemmed from gains in production, which have led to less reliance on more expensive imported wheat, as well as pricing adjustments that have reduced per unit subsidies. Wheat subsidy costs declined from 7.9 percent of total current expenditures in 1978/79 to 3.8 percent in 1980/81, thus freeing resources for other purposes.

Major changes are expected in Pakistan's PDS during the 1980's. The buildup in wheat stocks resulting from bumper crops in recent years is leading the Government to consider abolishing the wheat rationing system once stocks have stabilized at the 2-million-ton target. However, the Government feels that some mechanisms will still be necessary to stabilize wheat prices and to assure that wheat flour is available to the urban poor at a reasonable price: these problems remain unresolved. Ending stocks as of March 1983 were 1.6 million tons, up sharply from levels held during the late 1970's. With continued success in boosting production, Pakistan has the potential to become an exporter of wheat.

Sri Lanka Reforms PDS

In Sri Lanka, in contrast to other South Asian countries, distribution of available food among different income groups is remarkably even, partly because of the historically broad coverage of its PDS. Rice is distributed through the PDS at subsidized prices to low-income groups, and through open-market operations to influence prices. Rice is procured from farmers at a guaranteed purchase price and is also imported. Until 1974, imported wheat flour was also distributed at subsidized rates. Since 1974, wheat and wheat flour distribution has not been subsidized, although imports are still controlled by the government.

Outlays for operating the Sri Lankan PDS became quite burdensome in the mid-1970's, rising to 18 percent of total current account expenditures. Thus, in 1977, the Government decided to replace the distribution system that had existed for almost 35 years with a food stamp program that targets distribution of essential food commodities to low-income people only. The food stamp program has led to a decline in rice and wheat distribution requirements, and in budgetary costs. These adjustments in distribution mechanisms have been complemented by stronger increases in guaranteed rice prices than were implemented in the past in order to spur growth in production.

The outlook for Sri Lanka's PDS in the 1980's is for continued control of subsidy costs by restricting coverage to low-income groups. The improved producer incentives, which have been an integral part of reformed agricultural policies since 1977, will continue. At least in part because of the producer incentive program, yields rose at an annual rate of 2.6 percent between 1977 and 1983, double the growth rate of the previous 7 years. The prospects for strong growth in rice production in the 1980's

are bright in view of anticipated increases in irrigated area, which will result from completion of the Mahaweli Development Project. Hence, while growing demand for wheat will require continued wheat imports during the 1980's, requirements for rice imports to balance the PDS are likely to decline.

Future Import Needs Uncertain Despite New Policy Initiatives

The vulnerability of South Asian agriculture to the vagaries of the monsoon, coupled with the critical need to provide adequate supplies of cereals at stable prices for low-income consumers, will lead to continued imports of cereals to meet PDS requirements. Imports will remain variable and, although production shortfalls in

the region occur primarily in rice, imports will continue to consist mainly of wheat as long as wheat is cheaper. Forecasts of import requirements will remain heavily dependent on assessments of procurement, distribution, stock levels, and pricing policies in each country. Recent policy decisions, particularly related to pricing, suggest new initiatives across the region to boost producer incentives and reduce consumer subsidies. The extent to which these initiatives will succeed in balancing procurement and distribution in the next few years is unclear because of the uncertain nature of short-run supply response. If recent pricing policies are sustained, despite the political liabilities associated with higher cereal prices, the longer term result is likely to be a decline in cereal import requirements. [Richard F. Nehring (202) 447-8229]

Agriculture in China...

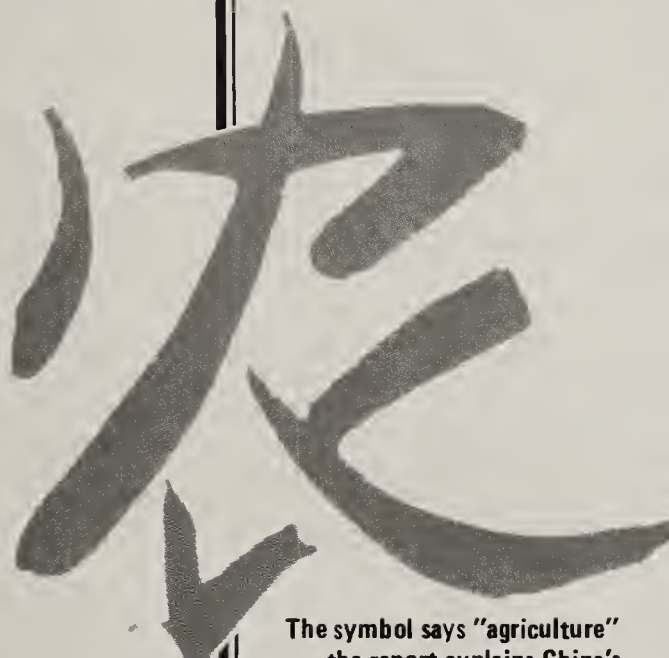
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Appendix Table 1.—U.S. Agricultural exports to South Asia by SITC category and country (U.S. fiscal years)

	Bangladesh		India		Nepal		Pakistan		Sri Lanka		Total	
	1979/80	1980/81	1981/82	1979/80	1980/81	1981/82	1979/80	1980/81	1981/82	1979/80	1980/81	1981/82
Animals & animal prod.	—	—	—	—	—	—	—	—	—	—	—	—
Meats & meat prod.	—	—	—	—	—	—	—	—	—	—	—	—
Poultry & poultry prod.	—	—	—	—	—	—	—	—	—	—	—	—
Dairy products	—	—	—	—	—	—	—	—	—	—	—	—
Non-fat dry milk	798	600	34	5,399	4,843	1,314	897	11,628	0	7,361	12,686	12,976
Fats, oils & greases	6,311	161	0	7,045	37,362	0	67,965	85,541	0	81,321	123,064	122,079
Inedible tallow	6,311	0	0	7,038	37,358	0	67,964	81,866	0	81,312	119,224	118,262
Grains & preparations	—	—	—	—	—	—	—	—	—	—	—	—
Wheat & products	1,152,971	308,876	420,600	314,790	948,236	10,341	205,101	182,440	234,058	148,023	1,556,996	2,284,480
Wheat	1,152,967	308,872	420,600	278,841	948,236	825	205,101	182,436	234,058	148,023	1,551,946	2,085,964
Bulgur & rolled wheat	0	0	0	24,863	592,908	0	0	0	0	0	278,841	341,935
Rice	0	0	54,557	61	58	0	2	2	4	0	63	61
Feed grains & products	2,015	2,283	2	13,842	19,948	0	0	4,883	0	0	22,279	54,689
Blended food products	797	0	0	35,173	38,504	531	1,491	0	0	6,352	43,520	27,884
Fruits & preparations	—	—	—	—	—	—	—	—	—	—	—	46,237
Nuts & preparations	—	—	—	—	—	—	—	—	—	—	—	—
Vegetables & preps	—	—	—	—	—	—	—	—	—	—	—	—
Feeds & fod (ex. oilcake)	—	—	—	—	—	—	—	—	—	—	—	—
Oilseeds & products	—	—	—	—	—	—	—	—	—	—	—	—
Oils & waxes (veg.)	—	—	—	—	—	—	—	—	—	—	—	—
Soybean oil	20,901	25,314	34,001	429,885	93,177	105	148,055	125,737	261,242	840	599,974	364,277
Tobacco (unmfgd)	20,880	25,295	33,994	427,668	61,815	105	147,422	125,727	259,898	837	597,057	362,920
Cotton (ex. linters)	51	101	79	6	22	99	232	340	297	1	290	489
Essential oils	15,924	5,549	16,610	0	56	0	246	237	236	1,392	17,564	17,023
Seeds (field & garden)	2	0	3	81	145	—	37	25	0	0	121	165
Other vegetable products	—	—	—	—	—	—	—	—	—	—	—	—
1,000 dollars												
Animals & animal prod.	3,404	564	148	6,217	21,580	422	34,429	43,285	50,978	224	44,435	61,677
Meats & meat prod.	0	18	0	173	0	0	12	28	16	101	113	109
Poultry & poultry prod.	18	0	2	1,901	1,907	0	280	694	475	66	537	700
Dairy products	273	400	144	1,847	1,876	422	685	2,517	5,088	54	3,089	6,189
Non-fat dry milk	244	251	44	1,847	1,876	422	318	2,469	3,665	0	2,504	4,226
Fats, oils & greases	3,110	85	0	3,332	17,747	0	33,255	39,215	45,062	0	39,697	53,087
Inedible tallow	3,110	0	0	3,310	17,740	0	33,252	37,445	44,903	0	39,672	51,567
Grains & preparations	183,579	46,809	77,811	80,109	187,630	1,930	33,450	30,200	34,653	26,593	330,639	412,125
Wheat & products	183,086	46,310	62,407	65,364	169,046	1,714	33,375	30,098	34,596	24,213	312,382	377,901
Wheat	183,084	46,308	62,407	3,773	100,523	176	33,375	30,094	34,596	21,707	247,849	334,750
Bulgur & rolled wheat	0	0	0	59,400	66,476	0	0	0	0	0	59,400	68,476
Rice	0	0	15,402	29	24	0	1	2	2	0	30	27
Feed grains & products	266	326	2	3,272	3,566	0	0	39	53	0	3,686	4,108
Blended food products	227	0	0	11,419	14,948	215	0	0	0	2,378	14,440	14,553
Fruits & preparations	0	39	205	73	51	2	21	5	4	36	136	391
Nuts & preparations	0	10	11	2,281	5,303	23	49	23	29	2	2,347	5,450
Vegetables & preps	11	148	39	642	4,621	4	31	105	32	81	766	4,913
Feeds & fod (ex. oilcake)	0	6	89	178	284	0	90	35	87	0	1,578	1,793
Oilseeds & products	18,157	15,618	17,567	276,894	69,919	444	90,273	68,461	127,485	638	386,246	155,039
Oils & waxes (veg.)	18,157	15,618	17,567	276,812	69,913	444	90,252	68,378	127,292	610	386,115	154,726
Soybean oil	18,108	15,592	17,554	275,395	48,072	443	89,735	68,365	126,616	604	384,120	184,914
Tobacco (unmfgd)	347	733	672	44	164	375	1,643	2,512	2,438	6	2,040	3,644
Cotton (ex. linters)	22,838	10,692	24,709	0	78	0	521	686	572	194	26,003	25,537
Essential oils	26	30	38	223	283	0	137	170	108	58	444	693
Seeds (field & garden)	3	112	12	0	17	0	73	246	280	21	97	405
Other vegetable products	59	183	470	757	34,206	13	563	1,305	1,295	177	1,586	2,156
Total	228,424	74,938	121,688	367,329	324,030	3,215	161,300	147,033	217,961	30,480	794,918	703,361

Source: U.S. Department of Commerce, Bureau of the Census

Appendix Table 2.—Support prices for principal farm commodities in South Asia

Country/ commodity	Marketing year	Grade	Average	1975/76-80/81 1980/81	1981/82	1982/83	Notes
<i>Taka/ton</i>							
Bangladesh							
Rice	July/June	coarse, aman	3,859	4,890	5,172	5,716	Procurement price
(% change)			(9.7)	(9.5)	(5.8)	(10.5)	
Wheat	July/June	F.A.Q.	2,504	3,130	3,375	3,675	"
(% change)			(10.7)	(4.5)	(7.8)	(8.9)	
<i>Indian rupees/ton</i>							
India							
Paddy	Oct./Sep.	coarse	850	1,050	1,150	1,220	Procurement price
(% change)			(7.4)	(10.5)	(9.5)	(6.1)	
Rice	Oct./Sep.	coarse	1,386	1,745	1,940	2,040	"
(% change)			(8.5)	(10.4)	(11.2)	(5.2)	
Wheat	Apr./Mar.	F.A.Q.	1,108	1,170	1,300	1,420	"
(% change)			(2.4)	(1.7)	(11.1)	(9.2)	
Corn ¹	Oct./Sep.	F.A.Q.	845	1,050	1,160	1,180	"
(% change)			(7.5)	(10.5)	(10.5)	(1.7)	
Groundnut	Oct./Sep.	F.A.Q., in shell	1,742	2,060	2,700	2,950	Support price
(% change)			(9.4)	(8.4)	(31.1)	(9.3)	
Soybean	Oct./Sep.	F.A.Q., yellow	1,686	1,980	2,300	2,450	"
(% change)			(7.4)	(13.1)	(16.2)	(6.5)	
Cotton ²	Aug./Jul.	common	577	599	N.E.	686	"
(% change)			3	0	—	—	
<i>Nepalese rupees/ton</i>							
Nepal							
Rice	Oct./Sep.	standard	2,629 ³	2,870	3,150	N/A	Procurement price
(% Change)			(5.5)	(6.3)	(9.8)	N/A	
<i>Pakistani rupees/ton</i>							
Pakistan							
Rice	Oct./Sep.	IRRI-6, av. brkns	1,290	1,575	1,812	2,000	Procurement price
(% change)			(6.2)	(20.0)	(15)	(10.4)	
Rice	Oct./Sep.	Basmati	2,803	3,425	3,750	3,825	"
(% change)			(6.7)	(16.2)	(9.5)	(2.0)	
Wheat	May/Apr.	standard	1,147	1,450	1,450	1,600	"
(% change)			(8.0)	(16.0)	(0)	(10.3)	
Corn	Oct./Sep.	standard	857	857	857	857	Support price
(% change)			(0)	(0)	(0)	(0)	
Soybean	Oct./Sep.	standard	N/A	2,680	2,925	3,050	"
(% change)			N/A	(0)	(9.1)	(4.3)	
Sunflower	Oct./Sep.	standard	N/A	2,950	3,325	3,500	"
(% change)			N/A	(22.3)	(12.7)	(5.3)	
Cotton ²	Aug./Jul.	american	778	869	925	952	Procurement price
(% change)			(4.9)	(8.0)	(6.4)	(2.9)	
<i>Sri Lankan rupees/ton</i>							
Sri Lanka							
Paddy	Jan./Dec.	coarse	1,996	2,450	2,817	2,817	
(% change)			(12.5)	(25.0)	(15.0)	(0)	

N.E. = None established. N/A = Not available. F.A.Q. = Fair to average quality.

¹Same procurement price is established for corn, sorghum, and millet. ²Cotton prices quoted per 480 lb bale. ³1977/78-1980/81 average.

Sources: Official government data for each country.

**Appendix Table 3.—Fertilizer production, consumption
and trade in South Asia¹**

Country	1974/75-1979/80 average	1979/80	1980/81	1981/82	1982/83 est.
<i>1,000 nutrient tons</i>					
Bangladesh					
Production	158	201	189	191	259
(% change)	(7.8)	(22.6)	(-6.0)	(1.1)	(35.6)
Consumption	312	401	415	394	461
(% change)	(22.3)	(14.3)	(3.5)	(-5.1)	(17.0)
Net Imports	193	279	175	203	122
(% change)	(19.2)	(-10.6)	(-37.3)	(16.0)	(-39.9)
India					
Production	2,372	2,987	3,006	4,093	4,500
(% change)	(14.1)	(1.2)	(0.6)	(36.2)	(9.9)
Consumption	3,923	5,255	5,516	6,067	6,430
(% change)	(15.7)	(2.7)	(5.0)	(10.0)	(6.0)
Net Imports	1,636	2,006	2,769	2,042	1,635
(% change)	(5.9)	(0.6)	(38)	(-26.3)	(-19.9)
Pakistan					
Production	365	413	639	692	775
(% change)	(7.1)	(-14.0)	(54.6)	(8.3)	(12.0)
Consumption	705	1,044	1,079	1,080	1,125
(% change)	(17.0)	(21.0)	(3.4)	(0.1)	(4.2)
Net imports	364	636	711	202	300
(% change)	(34.5)	(1.0)	(11.8)	(-71.6)	(48.5)
Sri Lanka					
Production	0	0	N/A	N/A	N/A
(% change)	—	—	—	—	—
Consumption	374	440	365	407	450
(% change)	(10.9)	(18.1)	(-17.0)	(11.5)	(11.0)
Net imports	383	376	282	237	N/A
(% Change)	(3.3)	(-1.3)	(-25.0)	(-16.0)	—

¹N, P, and K in nutrient tons.

Note: Data for country fiscal years: Bangladesh (July/June), India (April/March), Pakistan (July/June), Sri Lanka (January/December).

Sources: Official Government sources in each country; ERS estimates.

Appendix Table 4.—Land utilization in South Asia

Country	Arable Land	Cultivated Area		Area Sown More Than Once		Irrigated Area		Area Under HYV's ¹
		Net	Gross			Net	Gross	
		<i>Million ha.</i>		<i>Percent²</i>		<i>Million ha.</i>		
Bangladesh								
1975/76	14.28	8.49	12.61	4.12	48.49	1.32	1.41	1.66
1980/81	14.30	8.57	13.17	4.60	53.70	1.50	1.64	2.82
Growth rate (%)	.00	.18	.87	2.23	—	2.53	3.11	11.10
India								
1973/74	262.88	143.06	169.87	26.81	18.74	32.55	40.28	26.04
1978/79	265.40	142.94	175.18	32.24	22.55	37.96	48.09	40.13
Growth rate (%)	.19	-.02	.62	3.76	—	3.12	3.61	9.03
Nepal								
1970/71	3.84	1.98	2.23	.25	12.68	.20	N/A	.18
Pakistan								
1975/76	19.83	15.06	18.02	2.96	19.65	13.63	N/A	4.68
1980/81	20.15	15.47	19.33	3.86	24.95	14.32	N/A	7.78
Growth rate (%)	.32	.54	1.41	5.45	—	.99	—	10.70
Sri Lanka								
1970	1.00	.72	.87	.15	20.72	.34	.40	N/A
1980	1.30	.92	1.03	.12	12.79	.42	.50	N/A
Growth rate (%)	2.66	2.44	1.75	-2.21	—	2.11	2.26	N/A

¹Area under high yielding varieties (HYV's) applies only to cereals. ²Percent of net cultivated area.

Sources: Official Government sources in each country; ERS estimates.

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